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**THE MAKING OF A CHINESE UNIVERSITY:
A CASE STUDY OF
ORGANIZATION AND ADMINISTRATION OF
A KEY CHINESE UNIVERSITY
CIRCA 1995**

By
Juming Zhao

The Department of Educational Studies
Faculty of Education
McGill University

Montreal, Canada

A thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfillment of the requirement of the degree of Ph.D

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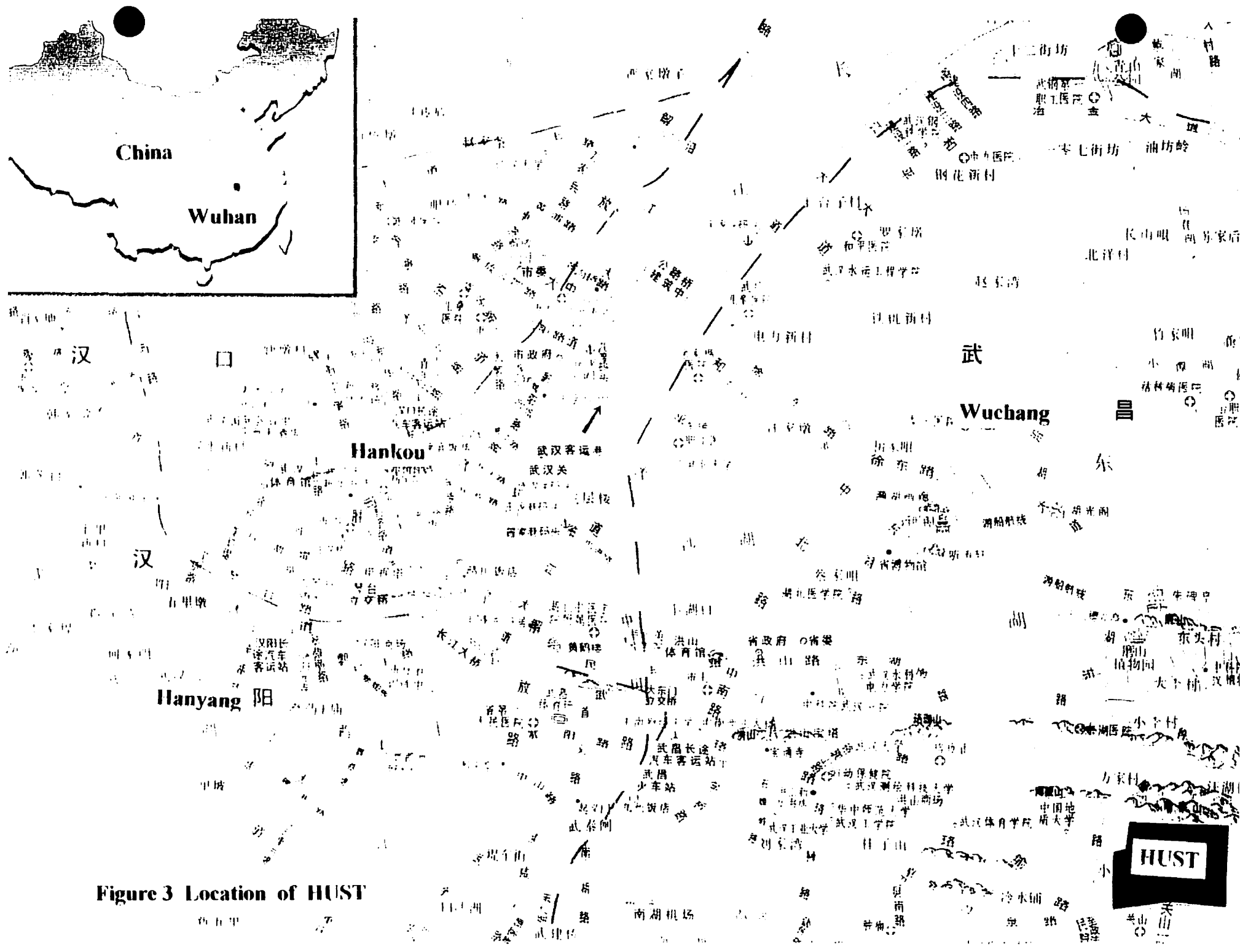


Figure 3 Location of HUST

Abstract

This is a case study of the administration and organization of Huazhong University of Science and Technology (HUST), a prominent Chinese university operating under the State Education Commission of China. The prime objective of the research was to understand how a modern Chinese university is governed at the cultural level - what are the implicit governing assumptions of the upper level administrators? An objective of the completed study is to promote international understanding of Chinese higher education in light of China's 1985 education reform.

Data was gathered during eight months of fieldwork conducted in the 1995 academic year. More than one hundred interviews were conducted. Documents in the University Archives were searched. My prior experience was drawn upon, as I had studied and worked at HUST for eleven years

After a brief description of the history and the campus of the university, the study includes selected major aspects of the administration of HUST including: student affairs, quality control in teaching, the academic echelon (a form of research team), academic personnel, social services, finance, and the Chinese Communist Party role in management.

The concluding chapter presents an ideal-type framework to describe HUST's administration. It has three concepts: institutionalized elitism, the danwei system, and a collectivism vision of management. The institutionalized elitism refers to the institutions for selection, training, utilizing, and honoring the best. The danwei system is defined as a working/living community under a single authority. Organizationally, it supports the institutions of elitism. Both concepts are based upon a collectivism vision, that is, a collective should take care of the interests of both the collective and its members, and the collective interests are supreme over individual interests. These ideas strongly conform to the Grand Union (datong), a utopian ideal of Confucianism. Although many changes have occurred in HUST since 1985, the features mentioned are unlikely to disappear in the near future. Knowing these features should help people in working with people in China, and monitoring the changes should be a help in predicting the progress of China.

Abstract

La présente recherche est une étude de cas traitant de l'organisation et de l'administration de l'université Huazhong des Sciences et de la Technologie (UHST), une école polytechnique de pointe et membre de la Commission Nationale de l'Education de la Chine. Cette recherche vise principalement à examiner au niveau culturel la gestion d'une université chinoise d'aujourd'hui et à mettre en relief les connaissances tenues pour acquises par ses cadres. De plus, elle vise à favoriser une meilleure compréhension, sur le plan mondial, de l'administration universitaire chinoise à la lumière de la réforme de l'éducation universitaire de 1985.

La cueillette des données a été effectuée sur une période de huit mois au cours de l'année académique 1995. Elle est le fruit de la réalisation de plus d'une centaine d'entrevues, de la consultation de documents dans les archives universitaires, ainsi que sur l'expérience qu'onze années en tant qu'étudiant et professeur à l'UHST m'ont apporté.

Suite à l'historique et à la description du campus universitaire, l'étude examinera certains aspects majeurs de l'administration et de l'organisation de l'UHST soit les affaires étudiantes, le contrôle des professeurs, l'échelon académique (une sorte d'équipe de recherche), le personnel académique, les services de soutien, les finances, et le rôle du Parti Communiste de Chine dans l'administration.

En guise de conclusion, le dernier chapitre présente un modèle théorique à trois composantes de l'organisation de l'UHST. Ce modèle comprend l'élitisme institutionnel, le système *danwei* et une perspective collectiviste de la gestion. Par "l'élitisme institutionnel," on entend les traditions déterminant la sélection et la formation des élites, le rôle des élites et l'hommage qui leur est rendu. Le "système *danwei*" se définit comme étant un système communautaire encadrant la vie et le travail de ses membres; elle est régie par une seule autorité et soutient l'élitisme institutionnel de l'UHST.

Ces deux concepts sont appuyés et guidés par une perspective collectiviste voulant que la collectivité s'occupe de ses propres intérêts sans négligeant ceux de ses membres. Soulignons, toutefois, que les intérêts de la collectivité priment sur ceux de l'individu.

De façon globale, ces trois composantes s'inscrivent dans l'idée d'une grande union (*da tong*)—une notion utopique remontant à la Chine antique.

Quoique la réforme de l'éducation en 1985 a causé quelques changements à l'université, les trois composantes du modèle ne semblent pas vouloir se modifier dans un proche avenir. Pourtant, pour mieux prédire l'évolution de la Chine, on suggère une attention particulière prêtée à tout changement. Comprendre l'importance de ces composantes serait un atout pour tout individu ayant affaire avec les habitants de la Chine.

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Abbreviations

AIPC	Average Income Per Capita
CCP	Chinese Communist Party
CCYL	Chinese Communist Youth League
CR	Cultural Revolution
EM	Education Ministry of China
GBO	Government Budget for Operation
HEI	Higher Education Institute, HUST
HEM	Higher Education Ministry of China
HUST	Huazhong University of Science and Technology
IMA	Institute of Machining Automation, HUST
LLS	Local Lowest score
SEC	State Education Commission of China
SMSE	School of Mechanical Science and Engineering, HUST
TRG	Teaching Research Group

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However, I alone take full responsibility for all viewpoints, errors, and deficiencies in the study.

Introduction

This is a case study of the organization and administration of Huazhong University of Science and Technology (HUST), a prominent or *key* Chinese university. The purpose of this study is to provide an in-depth investigation of HUST's organization and administration and the factors that have shaped these features in the past and present. This will deepen the understanding of Chinese key university administration during the age of reform. This opening chapter explains why Chinese university administration needs to be investigated; why an institutional perspective and case study method are suitable; and how this study is structured.

Why Study Chinese University Administration?

In terms of management, the year 1978 was a watershed for Chinese universities. Before 1978, Chinese universities as well as other state-run enterprises were tightly controlled by government; indeed, universities were government subsidiaries. Since 1978, the Chinese Communist Party (CCP) government has launched a series of reforms in the name of "reform and opening the door" in order to develop China's economy. "Reform" refers to replacing the planned economy with a market system, while "opening the door" refers to opening China to the outside world, particularly the developed Western countries.

As to the relationship between government and enterprise, the reform aims to delegate full authority to enterprises and to change their status from government subsidiaries to autonomous units in order to allow them to operate in a market system. That is,

this reform aims to fundamentally change the government-enterprise relationship. This reform plan was officially announced in 1984. Since then, China has been pushing into a new age. To mirror the 1984 reform of the economic system, the Central Committee of the Chinese Communist Party announced a decision to reform the educational system in 1985. The decision read:

The emphasis in the reform of the current higher education system is to change the system in which government has over-controlled institutions of higher education. [The government will] increase the schools' autonomy, strengthen the relationship of institutions of higher education with production, research, and other sections of society, and make higher education institutions aspire to meet the demands of economic and social development and accountable to these demands (GB 1988 p. 11).¹

This education reform sheds new light on micro-level management and calls for studies of university administration. Since 1985, many changes have occurred on Chinese university campuses. At the beginning, studies of Chinese higher education administration focused mainly on introducing Western university management systems to China. Many Chinese universities actively imitated their Western counterparts, and Western countries also put considerable effort into helping Chinese universities learn and master the Western experience (Hayhoe 1989). However, problems soon emerged.

As John Child, professor at Cambridge University and former Director of the China-European Community Management Institute in Beijing observed, the learning process in the Chinese-Western joint ventures which function as learning bases did not go as well as expected. He observed that, while few problems occurred in mastering new technologies, more problems occurred in learning new procedures and systems, particularly human resource management; and signs of learning managerial strategies or "patterns of thinking" were rare indeed (Child 1994, pp. 264-273). The three presidents of Huazhong University of Science and Technology (two former and one current) whom I

interviewed echoed Child's observation. They pointed out that Chinese universities could learn a lot from Western universities in advanced technology but much less in management because Chinese universities were very different from the West in terms of goals, institutions, and environment. Chinese universities had to find their own way. Obviously, there are barriers to the process of cultural interchange. Chinese enterprises changed their approach from copying the West blindly in the 1980s to selecting from the West carefully in the 1990s. (For attitude changes of Chinese government see Jiang Zemin 1997.)

This change in attitude has caused tension in international relations. Samuel P. Huntington, director of the John M. Olin Institute for Strategic Studies at Harvard University, pinpointed the significance of such attitude changes:

At a superficial level much of Western culture has indeed permeated the rest of the world. At a more basic level, however, Western concepts differ fundamentally from those prevalent in other civilizations. Western ideas of individualism, liberalism, constitutionalism, human rights, equality, liberty, the rule by law, democracy, free markets, the separation of church and state, often have little resonance in Islamic, Confucian, Japanese, Hindu, Buddhist or Orthodox cultures. Western efforts to propagate such ideas produce instead a reaction against "human rights imperialism" and a reaffirmation of indigenous values, as can be seen in the support for religious fundamentalism by the younger generation in non-Western cultures (1993, pp. 40-41).

Thus Huntington hypothesized that the fundamental source of conflicts in the post-Cold War world would be primarily cultural rather than ideological or economic, particularly between the Western and Confucianist and Islamic belief systems.

Perhaps it is true that the three cultures have fundamental differences. But Huntington's hypothesis is built upon the presupposition that different cultures will clash with each other. Thus his hypothesis actually assumes that in the final analysis cross-cultural

¹ All citations from Chinese sources in this study are translated by the author.

collaboration is impossible, particularly among the Western, Confucian and Islamic cultures, therefore undermining the optimism of globalization. To defeat this culture-clash mentality and to promote global cooperation, the first step is to promote cross-cultural understanding. To achieve this, systematic studies of China at the micro (or enterprise) level become important as such studies foster in-depth understanding of cultural differences essential to finding a common ground for cooperation.

The number of such studies is, however, very limited. In 1994, Child described the situation in Chinese enterprise management, which is the focus of most management studies on China. He commented that at the enterprise level, many studies focus on “the intention of the [market] reform,” but they rarely address the practices and effects of the reform. Many studies are “quick, one-off and generally superficial studies which concentrate on one aspect of Chinese management attitudes or experience ... These reports often employ a questionnaire-based methodology, the validity of which is particularly suspect in this context.” Some Chinese authors “present useful case-study material, but they do not usually permit the reader to assess the quality of the source of their information. It is also rather rare for them to present a broad comparative picture” (1994, pp. 2-3).

This situation is also true for the study of China’s university administration. I was unable to find a single study that provides systematic information on how a Chinese university is organized and operates in the current situation, and what actually happened in Chinese universities after the 1985 education reform.¹

Thus, the purpose of this study is to investigate Chinese university organization and administration and examine the effects of the 1985 education reform in one rather typical university.

Why Adopt an Institutional Perspective and Case Study Method?

Institutions are socially constructed, routine-reproduced rule systems. An institutional perspective is an approach which sheds light on an institution and seeks to explain

its effects. That is, an institutional perspective not only pays attention to various formal and informal institutions and their effects, but also seeks to interpret them (Jepperson 1991).

This perspective is particularly suitable for studies of Chinese enterprise management because the market system reform aims to change management institutions and, through these institutional changes, to change enterprises and the social structure as well. Applying an institutional perspective to study today's China is not new. In fact, this approach has been applied in many fields, e.g., political science, sociology, economics, and management, and has become a new tendency in sinology. However, most studies with an institutional perspective tend to build middle-level models. That is, they try to draw general institutional patterns in a specific field such as economy or politics (Halpern, 1993; Prime, 1993; Shambaugh, 1993). This approach has been criticized by, for example, Shambaugh who targeted studies of Chinese politics which reported a political stability that actually did not exist, as shown by the Tiananmen incident (1993).

However, Shambaugh did not make it clear whether such an incorrect analysis stemmed from the institutional perspective or from the middle-level approach. I consider that the incorrect report is likely due to a middle-level approach. Such a perspective could be risky for studies of today's China for two reasons. First, in the social science literature, there has for a long time been a general lack of micro-level studies. One cannot construct a middle-level model without a critical number of micro-level investigations. Second, the current reform is greatly changing China. During the reform, individuals assess, learn, adapt, change, and resist various institutions, old and new. In such a changeable situation, it is risky for any researcher to try to fit this changeable situation into a static middle-level model. On the contrary, a micro-level approach is more relevant in the current situation.

Studies of Chinese higher education have been done with many different research interests and perspectives, e.g., political control and curriculum, student selection and equity of access, pedagogy and culture, academic freedom and intellectuals, student activ-

ism and protests, study abroad and international migration of intellectuals, and so on. These studies provided broad information and many insights about Chinese higher education. However, the evidence used in these studies was drawn from many different places and diverse contexts. This is not a weakness. But it would be useful if a study showed how these issues occurred and were related to each other within a well-defined context, that is, within one university. The concern of context is essential, particularly for studies of management.

Additionally many other important issues are less studied and some have not been addressed at all, e.g., job assignment and interregional migration of graduates, student leader training and student recruitment to the Chinese Communist Party, education quality control and innovation, organization and management in university research, academic personnel, including recruitment, training, promotion, income determination, the work unit system as a management form (rather than a measure of social control), the social service system and its impact upon university administration, mutual influences between individual performance and living conditions and related management issues, and the Chinese Communist Party's role in management (not only as a political power), collectivism in university administration, and so on.² These issues are essential to a deeper understanding of the Chinese university administration. A way to handle these broad topics is to limit the scope of investigation, and so, a case study is a proper approach to address the complexity.

Finally, the primary purpose of this study is to promote international understanding of Chinese university administration and to foster international cooperation between Chinese and foreign universities. Thus, a case study method with its detailed description can provide the reader with a concrete picture of what a Chinese university looks like, how it runs, what it values and expects, where it is going, and what its problems are. Such knowledge would be very helpful for those who need to work with Chinese universities, academics and students.

However, this study is not limited to description. In order to deepen understanding of Chinese university administration, institutional analysis is consistently explored throughout the study, and an interpretive framework of HUST's administration is presented in the conclusion.

Composition of the Study

The strategy in organizing this study is to guide the reader from outside to inside, from the routine activities of the university to its administration, and from administrative practices to institutional analysis. This study has four parts and twelve chapters.

Part I contains two chapters: the introduction and the fieldwork and data sources. Chapter 1 introduces the objectives, subject, perspective, method, and structure of this study, while Chapter 2 describes the fieldwork and data sources.

Part II provides essential background information about HUST. Chapter 3 gives a brief history of HUST, describes the elitism of the Chinese higher education system, the battle of the "quality wind" vs. the "quantity wind" and the dramatic change Chinese higher education experienced after 1949 when the Chinese Communist Party assumed the power, and how HUST began and grew. Chapter 4 draws a picture of the HUST campus, from the aspects of geography, architecture, political ideology and culture, workplace, and the campus life. These chapters set the context for Part III.

Part III explores HUST's organization and administration in seven selected aspects: student affairs, teaching control, management of the academic echelon, academic personnel, social services, finance and the university-run industrial system, and the communist party's role in management. All of these chapters are organized similarly in that they first introduce the relevant macro (government) and micro (HUST) institutional context, then describe the work procedures and activities within the given context, and finally probe the conventional rules of these practices and their effects.

Chapter 5 concerns student affairs. The central element is elite education in HUST, and HUST's student management system. This chapter has six sections. Section 1 presents a case study of the 1995 HUST student recruitment to show how HUST competed for the best students with the three top Chinese universities and who were eventually chosen to study at HUST. Section 2 concerns the 1995 welcome-to-HUST activity which shows how new students were transferred from the parents' to the university's care. Section 3 is about military training for the 1995 cohort. As the primary purpose of this training was to prepare the new students for the discipline of boarding school life, military training became a component of student management. Section 4 is about the HUST student management system. The focus of this section is to show why the student affairs system functions mainly as a management, rather than an educational system, although it has named the "political ideology instruction system". Section 5 is a case study of the job assignment of HUST's graduates from 1992 to 1994. The interregional migration of graduates is the focus since this is an important social effect of the university.

The academic administration is the main focus in the next three chapters. They deal with teaching, research, and academic personnel respectively. Chapter 6 addresses teaching, and the central concern is China's top-down teaching quality control as this is a major feature of Chinese higher education. The case studies presented in this chapter show how China controls the educational quality, and why. Five arguments from five perspectives, political, economic, development of knowledge, culture, and academic ethics are presented, which illustrate how some Chinese view the top-down quality control. The question of control vs. innovation is also addressed. Chapter 7 turns to the organization and management of research in HUST. Particular attention is given to the academic echelon (*xushu tidui*), a special form of research team at HUST. A case study is presented which illustrates how Chinese government agencies, and HUST as well, fund and reward the best research and how these rules in turn influence university research organization and management. In addition, the communist party's role in management at the lowest, or teaching-research group level, is explored. This case shows the importance of a collectivist vision in academic echelon management. Academic personnel is the focus of

Chapter 8. Due to a general lack of studies of this subject in the current literature, this chapter systematically describes the academic personnel at HUST, from recruitment, training (including study-abroad programs and international migration of intellectuals), evaluation, promotion, to earnings (including changes in salary, working bonuses, subsidies, income estimation, and egalitarianism in wealth distribution). Throughout these three chapters, the reader can see the basic social values and the related management practices which operated at HUST in 1995. All these reveal that the relationship between HUST and its staff is quite different from similar relationships in Western universities.

The three preceding chapters reveal only half of the story, the working side of HUST. The other half is the living side of HUST, which is the subject of Chapter 9. It is well known that Chinese universities provide their staff with various social services, but rarely do studies discuss what kinds of services are provided, how they are provided, what is their influence on individuals' performance and university administration, and why Chinese universities need to keep their own social service system although it is purely non-academic. This chapter addresses these questions in the case of HUST. It describes HUST's social service system and management, covering health care, housing, child care, care of retirees, and other services. The point of this chapter is that HUST is not purely a workplace but a *working/living community under a single authority*. This organizational form is called *danwei* or the work unit system in China. This organizational feature creates a special life style in HUST, which in turn greatly effects HUST's administration. The 1985 education reform tried to do away with the *danwei* system, but after a decade, the *danwei* system is still alive and even stronger than before. Why? I address this question from an institutional economics perspective and argue that the *danwei* system is unlikely to disappear in the near future.

The financial difficulties plaguing Chinese higher education is another topic which has attracted much attention, but there are any hardly studies with systematic data to illustrate the reality and to demonstrate how Chinese universities have dealt with their financial difficulties in the past decade. Chapter 10 address both issues in the case of

HUST. It first describes the government budget regulations and illustrates how the role of government financing in HUST's revenue shifted from major to minor, while self-generated income changed from minor to major. This shift highlights the growing importance of self-generated income for HUST's operation. Then the focus turns to HUST's plan of developing a university-run industrial system as a way to generate more income. Note that like its social service system, the university-run industrial system is also a non-academic system. Why did HUST continually integrate non-academic systems into its organization, rather than exclude them as stipulated by the 1985 educational reform decision? The institutional economics perspective is employed to address this question. In the analysis of HUST's internal financial institutions, one will see the collectivist vision again in HUST's management, which was expressed in the phrase "play as a team."

All of these practices, regulations and conventions set a context for HUST's administrators. Within this context, Chapter 11 addresses HUST's administration, particularly focusing on how the Chinese Communist Party practiced its management role. This chapter has six sections. After providing statistics on party members at HUST over its forty-three year history, I discuss the party membership, including who was likely to be recruited by the party, what managerial privileges party members enjoyed, how these privileges influenced HUST's management, and how the party's disciplines influenced party members' behavior as well as HUST's management. Section 3 turns to the division between the presidential system and the party system internal work, which demonstrates what management powers were in party hands, and why and how the party system used its powers in HUST's management. In order to further explore the party's role in management, Section 4 provides an interview with Mr. Li, the CCP General Secretary of HUST (1984-1996). In this interview, Mr. Li reviews his work and life at HUST, particularly during the period 1984-1995. Section 5 then probes the party leader's role in terms of career path, major duties, policy making and implementation, and work style. This provides insight into how one university party leader actually did his job during this period. This interview and the following analysis echo the interview with a communist party branch secretary in Chapter 7. This chapter therefore provides a detailed picture of

how the party system works at HUST, which may tell the reader a clue why the reform goal of separation of the party system from the presidential system eventually failed after a decade. A short answer is that the party system was actively and deeply involved in HUST's operation and played an integrative role in the university affairs.

Part 4 is Chapter 12, the concluding chapter of this study. Pulling together the previous chapters, Chapter 12 presents a framework to interpret the features of the organization and administration of HUST. This framework has three elements: institutionalized elitism, the danwei system and a collectivist vision of management. Institutionalized elitism refers to the practices of selecting, training, utilising and honouring the bests, individuals and organisations. Section 1 reviews various practices of how HUST selects its students, professors and party members, trains and uses a group of them as leaders and role-models, and honours them for their achievements. These practices provide a mechanism of elite production and reproduction. This elite mechanism is built upon a collectivist vision of management, that is, a collective managed according to collective and individual needs, but with individual interests subordinate to collective interests.

The second element is the danwei system which has been defined as a work-ing/living community under a single authority. It reflects the institutional face of HUST's organisation. A danwei system has three features. First, it has at least two basic sub-systems, a working system for its committed functions and a social service system to support the life needs of its staff. The two systems makes the danwei a highly self-sufficient organisation. Second, it assumes the responsibility to care for all basic needs of its staff, e.g., working, housing, medical care, spouse's job, child care, care of retirees, and so on. This makes the danwei a family-like organisation. Third, the party system plays a major role in integrating all sub-systems and all major affairs. It is expected that the communist party's role will contribute to the unit's committed social functions. Section 2 briefly explores the origin of the danwei system and the ideological importance of the comrade relationship for danwei management. Thus, this reveals the reason why the reform dismissing the danwei system

met strong resistance at its beginning and signifies a revolution for the Chinese Communist Party as well as for Chinese society.

Where did institutionalised elitism and the danwei system come from? Section 3 links this issue to the Grand Union ideal, a utopian idea of Confucianism. By comparing Confucius's dream of the Grand Union society and practices of elitism and the danwei system at HUST, one will find that they share three similarities: meritocracy, a self-sufficient community, and a collectivist vision of management. I suggest that it is quite possible that the Grand Union ideal was the first model of the management style practised at HUST. In this sense, the Chinese Communist Party should be regarded as a successor of the Grand Union ideal.

Finally, this study considers the future of HUST's management style and concludes that although many changes have occurred in HUST since 1978 when China started its economic reform, these three features are unlikely to disappear in the near future. But it does not imply what will or will not occur in the long run. Thus, being aware of these fundamental values and organizational features will help those who work with Chinese people, and monitoring the changes of these features will help to predict the progress of China.

¹ See the bibliographies in P. G. Altbach and D. H. Kelly, ed. Higher Education in International Perspective: A Survey and Bibliography (London: Mansell Publishing Limited, 1985), Zhang Guocai, ed. Higher Education Research in China: An Annotated Bibliography (Hiroshima: Hiroshima University, 1989), in R. Hayhoe China's Universities and the Open Door (New York: M. E. Sharpe, 1988) and China's Universities, 1895-1995: A Century of Cultural Conflict (New York: M. E. Sharpe, 1996), in The World Bank China: Higher Education Reform (Washington: The World Bank, 1997), in D. Twitchett and J. K. Fairbank, ed. The Cambridge History of China, The People's Republic, Part 1: The Emergence of Revolutionary China 1949-1965 (New York: Cambridge University Press, 1987) and Cambridge History of China, The People's Republic Part 2: Revolutions within the Chinese Revolution 1966-1982 (New York: Cambridge University Press, 1991), in D. Shambaugh, ed. American Studies of Contemporary China (New York: M. E. Sharpe, 1993) and the electronic bibliographic database of ERIC from 1966 to 1997. These bibliographies clearly show that the dominant approach in sinology is a macro approach.

However, I would like to emphasize the importance of a potential contribution of a micro approach to the studies of contemporary China. One should not be surprised that there are few micro-level studies because it was impossible to conduct such studies until Chinese universities or organizations opened themselves to the outside world, and foreign and Chinese people needed to work with each other. Unfortunately, neither condition existed before 1978. This situation rapidly changed after 1978 when China opened its doors. Therefore more and more people, e.g., scholars, students and business people entered China to work with Chinese people, and more and more Chinese people went abroad to work with people there. Westerners want to know more about their Chinese partners. How do they work? What are their working procedures? What are their expectations and values? They want to know more about the particulars of Chinese enterprises and universities from within. They need practical advice, not just general background information. For such needs, macro-studies become irrelevant. In short, the changing situation calls for micro-level studies of the contemporary China.

² Ibid. However, this study only deals with the issues related to university management and excludes issues that are not related to management (e.g., curriculum and pedagogy) and that I did not have necessary data for some topics, e.g., women in higher education, tuition and its impacts upon higher education.

Fieldwork and Data

This chapter introduces the fieldwork and sources of data on which this study is based and the researcher's personal experience at HUST.

Personal Experience at HUST

It would be helpful if I introduce my experience at Huazhong University of Science and Technology first, as I spent about eleven years at HUST before I came to McGill University where I studied educational administration for my doctorate. In fact, my experiences at these two universities greatly influenced this study.

I entered HUST in 1982 as a master's degree student. After graduation in 1984, I worked at the Philosophy Institute at HUST for two years and seven years at the Higher Education Institution (HEI) of HUST. From 1977 to 1985, HUST had experienced a rapid expansion and a transformation of academic restructuring: from being an engineering university, HUST became a university with disciplines of engineering, science, humanities, social sciences and management. To advise the university administration on policy issues, HUST established the Higher Education Office in 1980. In 1987, the office changed its name to the Higher Education Institute after receiving authority to award master's degrees. It was one of the earliest higher education institutes in China. The mission of the institute was to advise the university leadership on management issues and to train administrators for HUST and other universities.

In Chinese universities, staff from academic system and administrative system are rarely close to each other. But at the beginning of my career at HUST, I had an opportunity to be close to both. In 1984, HUST ran an on-the-job training program for lower- and middle-level administrators, and I was asked to give courses to them. As I had had similar experiences to those of the students, we soon became close to each other and the friendships continued after the training program. In fact, the friendship with them was a part of the reason that I joined the Higher Education Institute later. When I conducted my fieldwork at HUST in 1995, most of them had been promoted as heads of departments, faculties and the university. They generously helped me in every way. They provided me written and oral information, explained administrative rules in great detail, and shared their work experience and insights with me. Furthermore, they allowed me to record our conversations and use them as data in this study.

From 1985 to 1992, I was involved in research projects from the Higher Education Institute, HUST, Hubei Province, and the State Education Commission of China (SEC). These activities gave me opportunities to observe the administration of HUST, and connected me with teachers, administrators, and support staff at all levels. I also had opportunities to discuss common concerns with administrators and researchers from other universities as well as from the province and the SEC. During these years, I visited more than twenty key universities in China, but most of them were engineering universities and comprehensive universities under the SEC (see Chapter 3).

The Higher Education Institution had two kinds of researchers: experienced administrators (the retired and present senior administrators) and inexperienced researchers like me. Obviously the two groups treated higher education administration as an academic subject, but we viewed it in different ways. The inexperienced group was more interested in imitating Western university administration. The experienced group agreed with this in principle but was very cautious in practice. So we had debates and discussions over the years. No doubt these debates and discussions were very helpful to me as I endeavored to learn the reality of Chinese higher education and university management. But in many

cases, I felt I was not very confident with my arguments since all that I knew about Western universities was from books. In contrast, the experienced researchers made their points from their experience. One statement of management I believed was that: "In the last analysis management is practice. Its essence is not knowing but doing. Its test is not logic but results. Its authority is performance" (Drucker 1973, p. xiv). The successful progress of HUST since 1977 supported the experienced group. So, I decided to study at a Western university in order to have an opportunity to observe how it runs with my own eyes. This desire sent me to McGill University to study education administration in 1993.

During my studies at McGill, three questions were always on my mind: what are the principle features of the Chinese university administration, where did they come from, and where are they going? In addition, I was bothered that there are many studies of Chinese higher education with specific foci but no single study systematically introduces and examines the Chinese university with a holistic view. From reading these studies, people who are unfamiliar with Chinese universities are likely to get an image of Chinese universities which is partially correct but incomplete. These concerns eventually led me to this study, which aims to present a systematic study of Chinese university administration.

Fieldwork and Data

Although I had eleven years' experience at HUST, I did not use the experience as the primary source for this study. Instead, I decided to reinvestigate HUST with my new experience at McGill University. I designed an eight-month fieldwork at HUST which would cover the annual routine of the university.

After receiving official permission from HUST, I arrived in Beijing in April, 1995. I visited the National Research Center of Education Development of the State Education Commission of China for general information about China's higher education in the years since I had left. The Center is a research institute for educational policies. Many strategy policies and innovations in education, e.g., long-term educational investment, national educational structure improvement, and educational quality control, are proposed

at this center and sent to the SEC for further discussion and final decision-making. My purpose in visiting this Center was to learn about the situation of higher education across the nation in 1995 and what new policies were being proposed and processed. This information would provide context and content for my study of Huazhong University of Science and Technology.

My visit to the Center was fruitful. In talking with researchers there, I learned that the SEC had changed its policy from “quantity growth” to “quality control.” In 1992, the SEC planned to increase the percentage of participants in higher education in the 18-24 age group from 3.4 percent to 8 percent before the year 2010, a significant increase in university enrollment. This was called “quantity growth.” When this plan was in effect for just two years, a downhill slide in educational quality appeared across China. Then the SEC changed its emphasis to resist the slide in the education quality. By 1995, restoring educational quality became the first priority of the SEC in higher education. The optimism for “mass higher education”, favored in 1992, was suspended. Instead, the new focus in 1995 was “controlling educational quality and increasing educational input.” I was told that the situation for China’s higher education was very difficult due to both the downhill slide in quality and financial difficulties. With this in mind, I went to HUST on May 3rd, 1995.

When I arrived at HUST, I visited the President and the General Secretary of Chinese Communist Party of HUST to thank them for allowing me to do my fieldwork at HUST. They welcomed me to do research on HUST management. One thing surprised me: the university still kept my former apartment vacant for my fieldwork.¹ This was a big favor. But the biggest favor was that the university allowed me to use the general files in the University Archive as data.² This was the most important source for learning about institutional changes stimulated by national educational policies and their effects at HUST. However, because the Archive was not equipped with a computer-based searching system, file-searching became a time-consuming task. For instance, it took me about twenty days to enter the data of the 1994 recruitment of 2,295 new students, and job as-

signments of 6,503 HUST graduates in period of 1992-1994 for statistical analysis. The director of the Archive explained that some documents I asked for were missing due to the careless record-keeping of administrative bodies. Despite this, these general files were the richest source for my study. Many of my interview questions were originally formulated from this data. Obviously it made my interview questions more precise and relevant.

The Higher Education Institute also gave me a heart-warming welcome. My previous colleagues asked me to work with them as before. I participated in HEI's meetings, attended academic conferences as a HEI member, gave lectures, and advised students. However, I was not paid for these activities because I was not officially on the payroll. But HEI gave me five thousand yuan from its research fund for my fieldwork. With this money, I traveled to five cities across China and visited six other universities for comparison purposes.

My fieldwork at HUST can best be described in three phases. The first phase was from May to the middle of July. During which time, I conducted informal interviews in order to refresh my friendship with people and get general information about HUST, but mainly concentrated on the study of documents in the University Archive and the HEI Library.

As well as the data from the University Archive, four other sources of data were important to this study. One is a history of HUST, published in 1993, written for the fortieth anniversary celebration of HUST. It is the first published history of HUST. Three of the four authors were from HEI. This book gives a historical review of HUST, basically from the viewpoint of administrators rather than academics, with some valuable statistics. But this book left some parts unclear. I consulted all the authors about the unclear parts to get more relevant information. The second source was from the General Office of Chinese Communist Party of HUST. For the upcoming Sixth Conference of CCP of HUST,³ this office prepared a set of statistics about HUST that covered the period from 1953 to 1994, particularly focusing on the period from 1984 to 1994. I was allowed to use this

data in my study. These statistics were very valuable because they not only exactly covered the period that this study focused and also saved me considerable time to collect these information in the University Archive. The third source consists of theses written by HEI master's graduates as well as the administrators of HUST. The fourth sources includes the papers and reports written by the administration departments of HUST like student affairs, research administration, teaching affairs, and international academic exchange and so on. Data from these sources are used in this study.

The second phase was from July to September when HUST was in summer vacation. I took this time to attend an academic meeting and visit six other universities. The academic meeting was small, only about forty researchers but they were from all over the country, and it had only one topic: reviewing Chinese higher education reform of 1985 to 1995. This meeting gave me a wonderful opportunity to learn from other scholars about the reform. The small size of the meeting was very helpful. Researchers could focus on crucial issues and exchange opinions on issues such as: what had been achieved and what unachieved, what are the problems, and what should be done in the next decade. After the meeting, I visited Shenzhen University (Shenzhen City), Zhongshan University (Guangzhou City), Guizhou University (Guiyang City), Yennan College of Finance & Economics (Kunming City), Beijing University (Beijing City), and Qinghua University (Beijing City). These universities are located from east to west and represent both the SEC universities and local universities (see Chapter 3). These activities refreshed and enriched my knowledge of Chinese higher education and confirmed that HUST is a typical key university under the SEC with particular academic strength in engineering fields. It is located in the central area of China. It kept a balance among academic development, self sufficiency and following the CCP ideology. In the past decade, HUST had flourished.

In the third phase, from October to January, I mainly conducted intensive interviews. These interviews were highly focused and detailed, usually lasting two or three hours. Some lasted four hours. Most of key people like the former and the present Presidents and the CCP General Secretaries of HUST were interviewed at least twice. In

China, the best interview place is not the office but the home. So, if possible, I conducted interviews at home, either the interviewee's or mine. My apartment became an ideal interview place which provided an intimate environment without interruptions. More than one hundred such interviews were conducted, excluding various types of occasional talks. Most of the interviews were recorded. If a tape recorder was unavailable, either brief notes at the time, or notes immediately after the interview were made.

For contacting students and teachers, I had lunches at two students' dining halls and dinners at two teachers' dining halls during the fieldwork. I also invited professors, administrators and students to have dinner at my apartment, and they invited me to dine with them. I observed two national meetings at HUST. One was the National Work Meeting for Postgraduate Education and the other was the National Work Meeting for Humanities Education in Higher Education Institutions. Both were held by the State Education Commission of China.

In order to investigate management at faculty and department levels, I selected the School of Mechanical Science and Engineering (SMSE). SMSE is quite special. Two members of the Chinese Academy of Science at HUST, two of four Presidents, two of four the CCP General Secretaries of HUST, and many other administrators at university, faculty and department levels were from this faculty. This faculty had successfully advanced its academic programs. Its research fund jumped from 0.9 million yuan in 1985 to 21.4 million yuan in 1995, twenty six percent of the total research fund of HUST in 1995. An interesting question was: why was this faculty so successful in the current environment? Thus I took a close look at this faculty.

As to the weaknesses of my fieldwork and data, there are three. First, the fieldwork was designed to cover the five major events in HUST's annual routine. They were: academic promotion in May, student recruitment and graduate job assignment from June to September, resident apartment assignment in November, bonus distribution in June and December, and annual work evaluation in January. I was able to observe the first four in

the field and missed the last one as I unexpectedly had to leave a few days before the event. Fortunately this routine has operated since 1985, and I already knew the 1995 plan. Therefore the data about the last event was drawn from literature the university sent to me later, what I learned in the field, and my previous experience. Second, I was not allowed to attend the university's "operating meetings," a biweekly work meeting dealing with operating issues. But I collected the reports of these meetings and interviewed the Vice President who was in charge of holding these meetings. Also I drew on my previous experiences when necessary. Third, most statistical data used in this study ended in 1994 because all administrative files and annual work reports about 1995 would not be sent to the University Archive until the middle of 1996.⁴ So, the data about 1995, 1996, and 1997 I either selected in the field or HUST sent to me after I left. Despite these weaknesses, very few people, to my knowledge, have similar access to a university in studying contemporary China. This gave me the confidence to report what I learned in the coming chapters.

¹ By regulation, a residential apartment that a staff member occupies should be re-assigned after s/he leaves the university. However, this regulation did not apply to those who studied abroad because HUST counted them as HUST staff. Some staff members who studied abroad did not return to HUST but their apartment was either left vacancy or was used by their relatives or friends. HUST changed its policy in 1994. The staff who study abroad should give up their apartment. After they return to HUST, HUST assigns them a better apartment (for details see Chapter 7 & 8).

² HUST has two categories of archive files. One is called "general files," e.g., reports and records on routine activities from various administrative bodies, and documents from the SEC and other government bodies. These files are open to all university staff for research purposes, but permission from the university is needed. The other files are called "secret files," such as personnel files and documents from the provincial and state governments with a "secret" mark. I was only allowed use of the general files in this study.

³ The conference was held in June of 1996 (see also Chapter 10).

⁴ By regulation, all documents of the current year are submitted to the University Archive the following May.

A History of HUST

This chapter and the next familiarize the reader with the history and campus of HUST, the basic context of HUST's administration. This chapter gives the history and related information about higher education in China. This chapter has three sections. The first describes China's system of higher education and HUST's position in that system. The second provides an outline of the history of Chinese contemporary higher education, and the third introduces HUST's history.

HUST, a Key University Under the SEC

Huazhong University of Science and Technology is a key university under the State Education Commission of China (SEC). This needs interpretation.

Regular Higher Education. China had a population of 1.2 billion in 1994 and had the largest education system in the world, with 277 million students. Among them, 4.6 million were enrolled in 2,300 institutes of higher education. The higher education system has two sections: regular higher education and adult higher education. Regular higher education means that all students in this section passed a national entry examination and enrolled in certain institute. These institutes are *regular higher education institutes*.¹ In contrast, the students who do not necessarily pass the national entry examination and enroll in other institutes belong to the adult higher education section. These institutes are called *adult higher education institutes*. In 1994, China had 1,080 regular higher education institutes with 2.8 million students and about 1,200 adult higher education institutes with 1.9 million students (Zhu Kaixuan 1994). Despite such a huge number of students,

the university students were only about 3.4 percent of the population of the 18-24 age group.² This figure is reduced to two percent if counting only the enrolment in the regular section. This low rate gives Chinese higher education the nature of elite education.

Key Universities. The central government selects a few of the regular universities and gives them special privileges in student selection, graduate job assignments, curriculum and program innovation, academic development, facilities and budget in order to keep a high academic quality in these universities. The purpose of this policy is to let these universities produce a few especially well-trained experts for China. These universities are called *key* universities, and the others are called *ordinary* universities.

China started this key university policy in 1954. Since then, the number of key universities has grown over the years.³ Table 3.1 presents this growth.

Table 3.1 China's key universities, 1954-94

year	key universities	total regular institutes	% in total
1954	6	188	3.2
1959	17	841	2.0
1960	64	1,289	5.0
1963	68	407	16.9
1977	88	598	14.7
1981	96	704	13.9
1994	about 100	1,080	9.2

Source: Data from CEYE (1984, pp. 329-336); DPB (1985, p. 50).

Clearly, key universities are at the top of China's higher education system.

The Universities Under the SEC. In terms of government authority, China's universities are governed by three kinds of government authorities: local governments (provinces or cities), ministries of the central government and the State Education Commission. Some universities are funded and governed by local governments which recruit students from the locale and assign their graduates jobs within the locale, thus serving the local interests. These universities are called *local* institutes. In the 1994, China had 720 local institutes (Zhu Kaixuan 1994).

Besides these, central government ministries or equivalents, for instance, the Ministry of Finance and the State General Bureau of Mapping, run universities to train experts for their specific industries. These universities are funded and governed by their top ministry, recruit students nationwide and assign graduates a job within their specific industry. These universities are called *ministry* institutes. In 1994, China had 63 ministries or equivalents and they ran 325 ministry institutes (Zhu Kaixuan 1994).

The State Education Commission (SEC) represents the central government in supervising all higher education institutes on educational affairs (see Chapter 6). It also runs some universities. These universities are called *SEC universities*. In 1994, SEC had thirty five universities: eleven comprehensive universities, thirteen engineering universities, six teaching-training universities and five language universities.⁴ These universities are special in two ways:

- The universities serve the national or regional⁵ interests.
- The universities serve as an experimental base for the SEC's policy and university models. The SEC usually tests its policies at its universities first and then asks other universities to follow their experiences.

These universities are funded by the SEC. They recruit students and assign their graduates jobs nationwide. Among the SEC universities, all comprehensive universities and engineering universities, two of the six normal universities and one of the five language institutes are key universities. Thus, the SEC key universities are the apex of Chinese higher education system. For instance, among the top ten universities in the 1995 National Graduate Studies Evaluation, eight were SEC key universities.

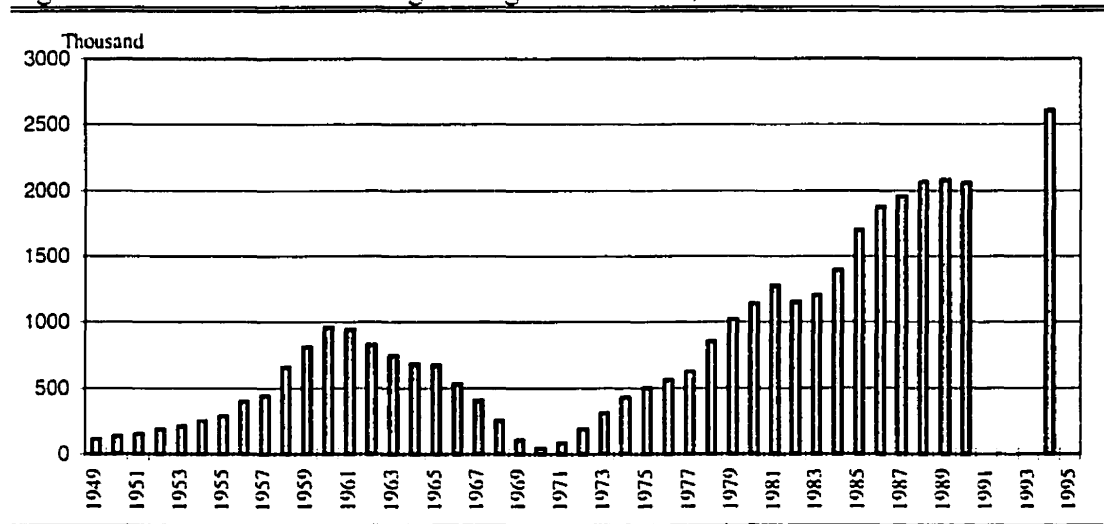
The Chinese higher education system thus has the shape of a pyramid. From the bottom up are: adult institutes, ordinary regular institutes, key universities and the SEC key universities. HUST, a SEC key university, was ranked ninth among the top ten university in China. This position strongly influences all aspects of HUST management.

China's Higher Education since 1949: Quality vs. Quantity

An American scholar who visited HUST in 1980 commented that the development of HUST mirrored the history of higher education in the People's Republic of China. In 1993, HUST published its first history, entitled Epitome: Four Decades of Huazhong University of Science and Technology. Obviously, HUST considered that its history reflected China's higher education after 1949. It is true if one compares the history of the contemporary Chinese higher education and HUST. I outline the post-1949 Chinese higher education history in this section and HUST's history in the next section.

The reader may note the curving changes of university numbers in Table 3.1. They and similar changes in student enrollment in Figure 3.1 tell us a dramatic story.

Figure 3.1. Enrollment in the regular higher education, 1949-94



Source: Data from DPB (1985, p. 50), (1986, p. 20), (1991, p. 20); Zhu Kaixuan (1994).

What occurred in these years? Figure 3.2 presents some selected events that occurred from 1949 to 1996.

Figure 3.2. Chronology of the selected events of PRC and HUST, 1949-96

1949	The Chinese Communist Party assumed power in China.
1950	The central government controlled higher education institutes. Presidential Responsibility System was applied to all universities.
1951	Unified graduate job assignment
1952	Unified national entry examination
1952-1956	China restructured its higher education system by copying the Soviet Union's model. A central unified administration system was established. The Education Ministry (EM) managed all universities with unified plans on construction, finance, personnel, teaching and student affairs.
1953	HUST was established as an engineering university.
1954	Unified program plans, teaching outlines and textbooks
1956	The CCP committee responsibility system replaced the presidential responsibility system.
1957	Anti-rightist movement. The CCP sent party leaders to universities to enhance its leadership.
1958	Education Revolution. 187 of 229 universities transferred to local governments. HUST transferred to Hubei Province.
1960	HUST was back to the EM and became a key university.
1960-1963	Education Adjustment. "Sixty Articles for Higher Education" were made which restored the centralized university administration system.
1966-1971	Cultural Revolution. Universities stopped enrollment in 1966-1971.
1971-1976	Some selected universities were allowed to recruit students from workers, farmers and soldiers by recommendation, rather than by passing entry examination.
1972	China established diplomatic relations with the USA and entered United Nations in 1975.
1976	Cultural Revolution ends.
1977	"Sixty Articles for Higher Education" were restored.
1978	China applied the "open-door and reform" policy and emphasized economy development.
1981	China established the national degree system and 22 key universities were approved to establish a graduate study faculty in 1982. HUST was one of them.
1977-1984	HUST established new programs in disciplines of science, social science, humanities, management and education and emphasized research and postgraduate education.
1984-1985	China introduced reforms in its economic system (1984), scientific research system (1985) and education system (1985) in building a "socialist commercial economy."
1984	The Education Ministry changed the leaders in many universities. HUST changed its president and the general party secretary.
1985.	Educational Reform. The Education Ministry changed its name to the State Education Commission. The change gave SEC an authority over other ministries.
1985-1995	HUST turned its focus to infrastructure building and academic quality improvement.
1989	Tian'anmen event.
1995	HUST ranked ninth in the 1995 National Graduate Studies Evaluation.
1996	HUST made a plan for the period of 1996-2010.

Source: Data from CEI (1983); Liu Yifan (1991); HUST (1993).

In my view, China's higher education has gone through three phases since 1949. The first phase, from 1949 to 1956, established a new higher education system in order to ensure that this system to follow the party line and aided China's modernization. The second phase, from 1957 to 1977, was a period of various political movements but less sig-

nificant progress in education. The third phase, from 1977 to 1995, was the reform period. This period was important for management because this reform aimed to establish a market system to replace the centrally planned economic system. Thus it greatly affected the management of China's higher education. According to the reform schedule, the entire reform may take a hundred years. Thus the past decade represented only a beginning. More profound changes will happen in the remaining decades. Now I discuss the above in detail.

This first phase consisted of two steps: taking over the authority of all universities and then restructuring them according to the Soviet Union's model of higher education system. As a result, a Soviet-Union-style higher education system appeared in China.

From 1949 to 1952, the CCP government took over all higher education institutes and turned them into state-run institutes. China established the Education Ministry (EM) to represent the central government in managing all universities. After that, all private and foreign-funded universities disappeared. The missions of all universities were changed to produce experts for China's "socialist construction." In a word, all China's universities should follow the party line and serve the new government.

From 1952 to 1956, the CCP government took the Soviet Union higher education system as its model and restructured China's higher education system. Accordingly, this restructuring had three features:

- **Restructuring universities.** Before 1949, China's universities were greatly influenced by the American university model. That is, a comprehensive university had one or two liberal schools and several professional schools. Colleges were either liberal arts schools or professional schools. During the restructuring, all universities and colleges were reorganized into two types: comprehensive universities and specialized institutes. Comprehensive universities had only two kinds of disciplines: liberal arts and science. Specialized institutes were established as independent schools and spe-

cialized in one or two fields such as engineering, agriculture, teacher-training, medicine and so on.

- **Relocating universities.** Before this restructuring, most institutes were located in the coastal area. After this restructuring, each of the six regions established a group of institutes, including one or two comprehensive universities, one or two engineering institutes, a medical institute, a normal institute and an agriculture institute. In addition, industry ministries established their institutes in these regions according to their plan of industrial development.
- **Centralizing administration.** The central government established a Higher Education Ministry (HEM) to supervise all higher education institutes and manage all comprehensive universities and polytechnic institutes. The individual ministries ran the institutes relating to their industries. The Higher Education Ministry made many management regulations about construction, finance, personnel and teaching affairs and applied them to all institutes (Liu Yifan 1991, p. 23).

Through this restructuring, China established a centralized and unified higher education management system. In this system, universities became the subordinates of their top government bureau. But even their top bureaus had no authority to change the rules made by the Higher Education Ministry.

In my view, the primary purpose of this restructuring was to destroy the old structure in order to disarm the potential resistance from the old academic system against the political power of Chinese Communist Party and to quickly build a new system to serve the new government. Thus “reorganization” (*zhengbian*) is the best word to describe this restructuring, as it was the same as the CCP did to its enemy troops.⁶ As this restructuring primarily came out of political rather than educational concerns, the criticism from those concerned with education was irrelevant.

The theme of the second phase was to find a *right* way to develop Chinese higher education. However, what was “right”? More accurately, was it to open universities to

ordinary people in order to have higher education accessible to the masses, or was it to train high quality experts, an elite education? Mass higher education means *quantity growth* but elite education implies *quality control*.⁷ Around this issue, a quality wind and a quantity wind blew over China during this period. Wind or *feng* in Chinese political terminology is used to describe a situation in which a powerful movement occurred, and toward a certain direction. Thus this period was filled with various political movements, e.g., the Educational Revolution (1958), the Educational Adjustment (1960-1963), and the Cultural Revolution (1966-1976). These political movements greatly affected China's higher education. As we saw in Table 3.1 and Figure 3.1, all curves occurred in this period.

Mao was in favor of the quantity wind. Mao criticized the quality wind on three issues:

- China's elite higher education system shut ordinary people out. It was against the CCP's mission which promised that ordinary people came first.
- An elite education system could not cultivate "proletarian successors" because students were shut in campuses and far from society, and they were over ordinary people after graduation.
- Real knowledge comes from practice rather than from books.

Thus Mao suggested that universities should "let (teacher and students) go out, and invite (ordinary people) in" (*zouchuqu, qingjinlai*).

However, some other top leaders, including Liu Shaoqi (the President of China in 1959-1966), Zhou Enlai (the Premier in 1949-1975) and Deng Xiaoping (the General Secretary of the CCP in 1956-1966 and the Deputy Premier in 1973-1975), had different opinions. Their essential concern was China's modernization which urgently needed many well-trained professionals. They believed that China, with its limited higher education resources, could not afford a higher education system for all. Thus they suggested running a low-cost adult education system for the masses but rejected the idea of opening

regular higher education to the masses (Liu Yinfan 1991, pp. 36-76; CEI 1982). Mao disliked this idea. A battle ensued.

It should be pointed out that educational quantity vs. educational quality is a common debate in contemporary higher education all over the world (Trow 1973).⁸ China was not an exception. If China had had a democratic decision-making procedure and/or a flexible higher education system, this debate would not have been a big problem. Unfortunately China had neither at that time. So, the two winds fought each other.

The quantity wind won the first battle in 1958. This was the "Education Revolution." Then the quality wind fought back in 1960. This was the "Education Adjustment" in 1960-1963. After his wind was defeated in 1960, Mao concluded that the quality-wind represented a "new-born bourgeois" class against the masses, and thus he called for a mass rebellion.⁹ This was the "Cultural Revolution." This time the wind was so fierce that all universities were closed and all students and teachers were sent to factories and countryside to receive "re-education" from workers and farmers. Many quality-wind leaders died during the Cultural Revolution. Liu died in 1969, Zhou died in 1975, and finally Mao died in 1976. After Mao's death, the Cultural Revolution was stopped, and the battle ended in 1976.

Looking back, we see that neither side won the battle. During this period, Chinese higher education neither increased in quantity nor improved in quality. The Cultural Revolution was a tragedy for China. After the Cultural Revolution, China had to increase higher education enrollment greatly as there had been no higher education for more than ten years. So one can see in Figure 3.1 that the enrollment increased rapidly after 1977.¹⁰ A senior officer of the SEC commented on this time with a very sad tone: "This was a *tortuous time* for our country. All people suffered."

The theme of third phase (1977-1995) was reform: building a market economy system to replace the centrally planned economy system. This reform caused profound

changes in the existing university management system. However, the changes that have occurred over the past two decades represent a beginning; the future of the reform is unpredictable. Keeping this consideration in mind, I divided the past two decades into two periods: the preparation period, from 1977 to 1984, and the initiative period, after 1984.

After the Cultural Revolution, China's economy suffered a considerable setback and was far behind the advanced Western countries like the United States and Japan. Developing the economy became urgent. In the period 1977-1984, China on the one hand resumed its old management system to help the country recover from the chaos of the Cultural Revolution, and on the other hand, experimentally applied some market measures in the agricultural sector and in a few industrial enterprises in some provinces. These experiments were very successful. Thus, the Chinese Communist Party decided to extend these market measures to all industries nationwide. In 1984 and 1985, the party issued three documents to push the reforms in the economic system (1984), in the scientific research system (1984) and in the education system (1985). The CCP government announced that China was going to build a market economy system to replace the planned economy system. Now China has entered the era of reform.

Clearly, the reform is economy-oriented by its nature. As a matter of fact, the party has no intention of giving up its leadership over China. On the contrary, the party believes that a successful economic reform will strengthen its leadership. Here is the assumption that China's market economy system will not endanger China's socialist political system as well as the party leadership. Thus, this reform can be a great social innovation if it succeeds or a nightmare if it fails.

The changes that occurred in the second period will be covered in the coming chapters. According to the reform plan, the reforms in higher education should serve China's economic development and strengthen the party's leadership. Any changes diverging from these two principles would be halted. For instance, the presidential responsibility system was experimentally restored to replace the party committee responsibility

system in 1985 in some universities and was halted in 1996 as it was considered to be weakening the party leadership over universities (for details see Chapter 11).

From a historical view, I would argue that the Chinese Communist Party is still struggling to find the *right* way for China's development as well as for the development of higher education, although it has been in power almost half a century.¹¹

HUST: Four Phases

HUST's history can be divided into four phases. From 1952 to 1956 was the establishment phase. From 1957 to 1977, HUST experienced many changes without significant progress. From 1977 to 1984, HUST made three changes: strengthening research, emphasizing postgraduate education and establishing programs in the disciplines of sciences, social sciences, humanities, management and education. These greatly changed HUST's academic structure. After 1985, HUST turned its focus to improving its infrastructure and academic quality. This strengthened HUST's position as a leading university. In 1995, HUST was among the top ten of China's key universities. In 1996, HUST planned to explore its role in the international academic community over the next fifteen years.

Building a New University: 1953-1957

HUST was established in 1953 as a result of the 1952 university restructuring. In 1952, the Government of Central-South Region decided to establish a mechanical engineering institute and an electrical engineering institute at Wuhan, as this city was the largest city in this region and was destined to be a major industry center. Later the government decided to merge the two institutes into a polytechnic institute. This was HUST.

The original departments were from five universities: Wuhan University, Hunan University, Nancang University, Guangxi University and Huanan Engineering Institute. The first four were national universities before 1949. HUST' original name was Huazhong Engineering Institute. It had four departments: Mechanical Engineering Depart-

ment, Diesel & Auto Engineering Department, Electrical Engineering Department and Power Engineering Department. A total of 202 teachers (46 full professors, 25 associate professors, 45 lecturers and 86 teaching assistants) and 2,673 students were transferred to HUST. On October 15, 1953, HUST officially announced its establishment (HUST 1993, pp. 3-7). Because it was established after 1949, HUST identified itself as a “new university.” In contrast, the universities established before 1949 usually identified themselves as “old universities.”

In terms of academic freedom and autonomy, the new and old universities do have some differences. Most universities established before 1949 were modeled on Western universities, particularly American universities, in organization and management. Their staffs are still proud of their pre-1949 history and like to keep their old traditions. This is particularly true for the few prominent universities like Beijing University and Qinghua University. Academic staff in these two universities enjoy more freedom and autonomy in academic affairs. In contrast, the new universities, particularly the key universities like HUST, seem influenced more by the party’s pre-1949 cadre-training tradition and tend to follow government guidance.

Another major factor is that HUST is an engineering university. In general, the political movements had less impact upon engineering universities than upon comprehensive universities. Academics in the fields of science and applied science enjoy more freedom than their colleagues in the fields of humanities and social sciences. For instance, in The Outline of China’s Educational Reform and Development, academics in the fields of science and applied science were encouraged to catch up the international advanced level, but those in the fields of humanities and social science were required to follow the party line and focus on China-related issues (Central Committee of the CCP 1993).

In general, HUST tends to follow government guidance but enjoys certain freedom as it is an engineering university.

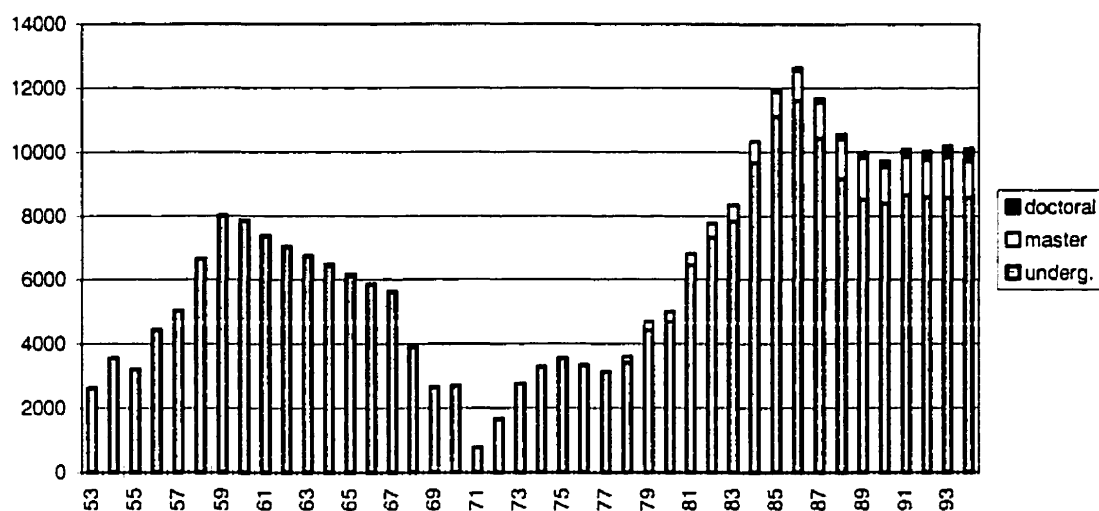
In this period, the first priority of HUST was to establish its organization and management. In this aspect, the centralized management in 1952-1956 was considered helpful. In the history book of HUST, the authors described HUST's changes in a positive tone. According to the book, HUST established its organization and management system during this period. Teachers and students from five universities were quickly merged and united. Everything seemed perfectly under control. A new university appeared after four years. In 1956, HUST had started to dream to "reach or get closer to the international standards in some fields within the next twelve years" (HUST 1993, p. 37). In short, HUST seems to have benefited from the centralized management system. Why? I presented this question to a former senior officer of HUST. He said:

Try to remember that all teachers and students were from five different universities. Each of them had their own tradition, which they brought to HUST. Without the centralized authority, how could HUST overcome the various barriers and unite HUST in such a short time? I do not mean the centralized unified management system was always good. But on this issue, HUST did benefit from it. The centralized management helped us break down sectarianism and gave HUST a good tradition: *Unity*.

Changes in the Years of Agitation: 1957-1976

Similar to China's situation in this period, HUST also experienced many changes but without significant progress. Figure 3.3. presents the enrollment in 1953-1994. One can see that HUST's enrollment experienced a similar change as that in Figure 3.1. From 1957 on, enrollment rapidly increased, reaching its highest point in 1959. After that, enrollment fell from 1960 to a low in 1971. In fact, HUST stopped recruitment from 1966 to 1971. In 1971, HUST started its recruitment of workers, farmers and soldiers by local government recommendation, rather than by entry examination. In 1977, entry examinations were restored and the enrollment of HUST increased rapidly.

Figure 3.3. Enrollment of HUST, 1953-94



Sources: Data from the CCP General Office of HUST; HUST (1993, pp. 341-343). Adult students are excluded.

HUST was extremely busy in the period 1957-1960 and very quiet during the Cultural Revolution. According to HUST's official history, during the years 1957-1960 HUST developed from four departments with nine programs to eight departments with thirty seven programs. Students and teachers were very busy, joining the "academic revolution," participating in "all-people physical exercises," learning Mao's work, running factories, producing iron and steel, having military training, doing technical innovations, and participating in volunteer work.

To carry out all these activities, HUST adopted a new study schedule in 1958: part-time work and part-time study. The first-year students studied half a year and worked half a year. The others students followed a 1-3-8 system: one month vacation, three months' work and eight months' study. Students and teachers went to factories to help their production and technical improvement. They carried out a total of 7,000 projects.

With the slogan "Factories run universities and universities run factories," HUST's students set up 180 factories in July of 1958 but these factories soon went bankrupt due to lack of resources. HUST was asked to produce 800 tons of iron and 1,100

tons of steel in 1958. All students and staff put their full effort into this but eventually failed. HUST's teaching factory turned to production of lathes. Thousands of students participated in volunteer work in factories, construction sites, villages and other sites.

But study time was sharply reduced. According to a survey of a program in the Mechanical Engineering Department, in the three years from 1958 to 1960, the students spent about 500 days on study, 190 days on work, 144 days on research and 88 days on political activities. Among the 500 study days, only 47 percent were in-class study and the rest were other forms of study such as having lectures at factories.

In 1960, the quality wind fought back. HUST was asked to review its work over the past three years. HUST completed its review in 1961 and reported three problems:

- Relationships between students and teachers, and between the party members and masses were tense.
- Students and teachers were overwhelmed by study and work.
- Teaching activities were interrupted very often, and teaching was ineffective.

But HUST also reported three positive results:

- The idea that education should serve economic development was enhanced.
- Teachers and students followed the party line more consciously.
- HUST gained experience in combining education, research and production.

During the "Education Adjustment," HUST was asked to cut its programs from thirty seven to eighteen. But HUST was promoted to key university status in 1960.

During the Cultural Revolution, HUST did not make any progress. At the end of the Cultural Revolution, HUST was still a four-year engineering university. Academic work was stopped in the first five years. Teachers and students were sent to factories or the countryside to participate in production work, and the campus was almost abandoned.

After 1971, HUST started to recruit new students from workers, farmers and soldiers. But the quality of the teaching was quite low.

During the period of 1971-1976, HUST made preparations for its later development:

- It established some new programs. The number of its programs was doubled from eighteen in 1971 to thirty six in 1976.
- Some academics concentrated on research, mainly in engineering projects.
- It transferred many new academics into HUST. The number of academics increased from 1,144 in 1971 to 1,707 in 1976.

In short, from 1957 to 1976, HUST experienced many political disturbances and grew in some ways but did not make real progress. The real progress at HUST occurred in the third and fourth phases.

Restructuring HUST: 1977-1984

After the Cultural Revolution, China had to foster its higher education. HUST and other universities were developed after 1977. But HUST's development was quite special. HUST not only increased its student enrollment and numbers of professors but also changed its academic structure in three aspects:

- Emphasized research that changed HUST from a teaching-oriented university to a more research-oriented university.
- Established programs in fields of science, social science, humanities, management and education that changed HUST from an engineering institute into a more comprehensive university.
- Emphasized postgraduate education that changed HUST from a purely undergraduate university to an undergraduate/postgraduate university.

These actually changed its academic structure as well as its goal and path. Zhu Ji-
usi, the President and the CCP General Secretary of HUST in this period, played a crucial
role in these changes.

Zhu Jiusi (1914-), graduated from Yangzhou Middle School and studied at the
National Wuhan University in 1936. In 1937, he went to Yen'an, the major CCP revolu-
tionary base during the Anti-Japanese War and joined the party. Then he studied at
Kangda (a short name for the Chinese Anti-Japanese Military and Politic University), the
major military/political cadre-training institute of the CCP. After graduation, he worked
as a propaganda cadre in the CCP troops and governments in the CCP controlled area be-
fore 1949, and in Tianjing City and Hunan Province after 1949. In 1953, he was ap-
pointed as Vice Chairman of the HUST Preparatory Committee. Since then he has
worked at HUST. He was a Vice President in 1955, Vice General Party Secretary in 1956,
the General Party Secretary in 1961 and the President as well in 1972. Then he was the
General Party Secretary and the President of HUST until 1984. After 1984, he retired
from the two positions and presently works at the Higher Education Institute of HUST as
a senior researcher (HUST 1993).

Zhu's experience was significant for his success in three ways:

- He is a veteran of the party. This gave him a solid social status.
- He served as HUST's leader for a long period. He built a management system suitable
for his work style, and eventually he became the core of the system.
- He was educated at the National Wuhan University, an American style University and
Kangda, the major CCP cadre-training base. He admired the American research uni-
versity model on the one hand and consciously followed the party line on the other
hand. But he did not follow the Education Ministry guidance. Instead, he insisted on
running HUST as he thought it should be run.

Since 1972, he has encouraged academics to conduct research. This has given
HUST a new direction. He argued with the Education Ministry that HUST should have

two focuses, both research and teaching, as research is essential for good teaching. The Education Ministry disliked his idea and hoped HUST would focus on teaching. But Zhu insisted on his idea (Zhu Jiusi 1992). Since then research has become a focus of HUST. The research fund was increased from 0.6 million yuan in 1972 to 89 million yuan in 1995. The manpower input in research was equivalent to 1223 full-time researchers in 1994 (see Figure 7.1).

In 1979, he visited the United States, Canada and Japan and had a “very deep impression that all prominent universities [in these countries] are comprehensive” and many of them were developed from specialized institutes to a comprehensive universities. Thus, he pushed HUST toward becoming a comprehensive university. Again he resisted the Education Ministry as the latter wanted HUST to be an engineering rather than a comprehensive university (Zhu Jiusi 1992). Zhu stuck to his beliefs. In 1976, HUST had only programs in engineering but in 1995 had programs in the fields of sciences, humanities, social sciences, education, management and medicine. This changed HUST’s direction.

Consequently, postgraduate education was emphasized. He put great effort into postgraduate education. He invited many scholars from other institutes to supervise HUST’s postgraduates and helped HUST build postgraduate programs. For instance, I was sent to Beijing University to take courses at the Department of Philosophy and meanwhile was supervised by scholars from the Chinese Academy of Social Science and the Chinese Academy of Science for my thesis. This strategy was very successful. In 1982, China allowed twenty two key universities to establish a postgraduate study school. HUST was one of them.

In my view, Zhu changed HUST according to an American research university model. This was the cause of his conflict with the Education Ministry as the Education Ministry wanted HUST restoring the Soviet Union model. In fact, in 1979, Zhu asked for the translation of a history of the Massachusetts Institute of Technology (MIT) and gave it to all the teachers. People said, “HUST is going to follow MIT.” In the 1980s, the Ameri-

can research university model became popular again among Chinese key universities. Zhu as a pioneer, along with HUST, became famous in China. But Zhu rarely mentioned this event when I worked with him in the Higher Education Institute. Once I asked him the reason. He said he just wanted to open people's minds rather than encourage them to copy MIT. It would be the same mistake as copying the Soviet Union model.

In short, HUST changed its academic structure rapidly during this phase. This is real progress. But HUST's substantial progress took place after 1985.

Strengthening HUST as a Leading University: 1985-1995

In 1984, the Education Ministry (EM) changed the university leaders at most universities. Zhu was retired. Huang Shuhuai and Li Dehuan were appointed as the President and the General Party Secretary of HUST respectively. Huang was a young assistant professor at Wuhan University when he was transferred to HUST in 1953. Li had graduated from HUST in 1954. Huang was in his position from 1984 to 1993. Yang Shuzi replaced him as the President in 1993-1997. Yang graduated from HUST in 1955. Li was in his position from 1984 to 1996. HUST had applied the Party Committee Responsibility System since 1956 (for details see Chapter 11). With this system, the university party committee assumed the final responsibility and supervised the presidents. Thus Li as the General Party Secretary actually played a major role during the decade of reform.

However, these three university leaders considered that their most important contribution to HUST was that they halted HUST's overly rapid extension during 1977-1984 and then spent ten years filling Zhu's great but overblown frame. They put great effort into infrastructure building and academic quality improvement. In Mr. Huang's words, "What we did was to fill Zhu's great framework with bricks and stones." Mr. Li's words were even more humble: "I was just like a pupil in learning university administration. I never dreamt I would make big progress overnight. But I do expect to make small progress every day."

It is true that the most substantial progress of HUST was made in this period as we will see in the coming chapters. Here is an example. In 1984, the Deputy Minister of the Education Ministry commented that HUST had made great progress but its infrastructure was weak and academic quality was poor (HUST 1993, p. 237). But in 1995, the Chair of the SEC commented that “It was really not easy for HUST to make this place” after he learnt that HUST ranked ninth in the National Graduate Studies Evaluation.¹² The comment had changed. After twenty years’ hard work, HUST was able to say with confidence that it was a leading university in China.

In 1996, HUST outlined its development for 1996-2010. In the outline, HUST planned to explore its role in the international academic community. But it insisted its goal would be to “build a leading *socialist* university” (HUST 1996).

In summary, an obvious feature of Chinese higher education system is its elitism, which can be observed in two aspects, 1) the low percentage of university student enrollment in the 18-24 age group, and 2) the pyramidal form of the system, from adult institutes, to ordinary regular institutes, to key universities.

There were two opposite opinions about this feature among the top leaders of China. Mao was against it because he believed that such a system did not open its door to ordinary people and was not good for educating “proletarian successors.” Thus, he asked for mass higher education. Some other top leaders were concerned more about China’s modernization that needed well-trained professionals, and that China’s higher education resources could not afford mass higher education. Thus, an elite higher education system was necessary. The battle between the two opinions fought over China and the battle greatly impacted on China’s post-1949 higher education. After 1976, quality control wind dominated China’s higher education.

Huazhong University of Science and Technology was born in the higher education restructuring in 1953. Its students, professors and departments were from five universities. Some senior leaders of HUST considered that the restrictive centralized management helped HUST to establish its organization and administration in its early years. HUST did not make real progress in the period of 1957-1976. From 1977 to 1995, HUST restructured its academic system from a purely engineering university to a more comprehensive university, prioritized research, and emphasized postgraduate education. These measures strengthened the leading position of HUST in Chinese higher education system. In 1995, HUST was ranked ninth among China's key universities. This position in turn greatly influenced all aspects of HUST administration.

¹ In fact, some universities like HUST in the regular section have an adult education faculty and recruit adult students. For instance, HUST had a total of 16,314 students in 1994. Of them, 3,560 were enrolled in the Adult Education Faculty. But in general the main body of the students in the regular universities are those who passed the entrance examination.

² This number was from the National Education Research Center of SEC. The numbers from a World Bank report are that in 1994, in the 18-22 age group, the enrolment in the regular section is 2.4 percent and 2 percent in the adult section (The World Bank 1997, p. 5). However, the same report gave the percentage in the regular section in 1993 as 2 percent (see the Table 1.1, p. 6). It seems impossible that after one year, the enrolment in the regular section increased 20 percent. Thus, this study did not cite the World Bank's numbers. In addition, in the World Bank report, the numbers of Chinese universities in the regular section are questionable. According to Zhu Kaixuan, the Chair of SEC, at the end of 1994 (December 16), China had 1,080 universities. Of them, there were 35 universities under the SEC, (27 of them were key universities,) 325 ministry universities, 713 local higher education institutions, 7 non-government-funded accredited higher education institutions. The numbers in the World Bank report are: in the total 1,080 universities, 36 universities under the SEC, (all of them are accounted as key universities,) 331 ministry universities and 713 local higher education institutions, plus 16 non-government-funded accredited higher education institutions (The World Bank 1997, pp. iv-v). Thus, this study is very cautious in citing the statistics from the World Bank report.

³ After 1993, China's government launched a project called "211 project" which means "to build about 100 key universities to prepare high quality experts for the 21st century" (The Central Committee of CCP 1993). Since then, those on the "211 project" list are considered as key universities.

⁴ The 35 universities under the SEC were:

- 11 comprehensive universities: Beijing University, People's University of China, Nankai University, Jilin University, Fudan University, Nanjing University, Xiamen University, Wuhan University, Zhongshan University, Sichuan United University, and Lanzhou University,
- 13 engineering universities: Qinghua University, Tianjing University, Northeast University, Dalin University of Science and Technology, Shanghai Jiaotong University, Tongji University, Southeast University, Zhejiang University, Huazhong University of Science and Technology, Hunan University, Huanan University of Science and Technology, Chongqing University, and Xian Jiaotong University
- 6 normal universities: Beijing Normal University, East China Normal University, Northeast Normal University*, Huazhong Normal University*, Huanan Normal University* and Southwest Normal University*.

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- 5 foreign language institutes: Beijing Institute of Languages*, Beijing No. 2 Foreign Language Institute*, Shanghai Institute of Foreign Language, Guangzhou Institute of Foreign Language*, Sichuan Institute of Foreign Language* (CEYE 1984, pp. 334-336).

*: Non-key universities.

⁵ China has thirty provinces (not including Taiwan), grouped into six regions. They are Northeast, North, East, Central-South, Southwest, and Northwest. Each region has several universities under the SEC, usually two comprehensive universities, two engineering universities, a normal university and a language institute.

⁶ During 1946-1949, the CCP troops defeated the Nationalist or Kongmintong troops and "reorganized" millions of the capitulating troops. Thus, the CCP had rich experience in "reorganization" to defeat the potential resistance in China's universities. In my view, Mao suspected that many academics in these universities would use their academic power against the CCP's political power.

⁷ I realize that I oversimplify the history of this period. A full account of this history needs another study. Here I only want to point out that, in my view, Mao and a few other top leaders debated elite versus mass higher education as the two kinds of higher education responded to different concerns and required different strategies. This debate by its nature would have been politically sensitive anywhere in the world. It became a tragedy in China. But, this debate was not the only but an important cause of the Culture Revolution.

⁸ In his book: Problems in the Transition from Elite to Mass Higher Education, Trow pointed out a series of problems related to elite and mass higher education. He noticed that two kinds of higher education had their special features and caused special problems for society. For instance, elite higher education made the university "the home of the social and economic elite," but mass higher education concerned the "democracy and egalitarian." Therefore, the transition of elite higher education to mass higher education greatly affect society regarding academic standards, admissions, curriculum, pedagogy, student career path, location of power and decision-making, functions of higher education and so on (Trow 1973).

⁹ From 1961, Mao started to attack the quality-wind from educational goals, curriculum and pedagogy to management by directly talking with the masses and ignoring the regular work procedures. In his talks, Mao considered the quality-wind represented a "bourgeoisie class" in the CCP which was to "win the younger generation away from proletariat." Thus Mao thought that this was a "class struggle" and called for a rebellion of the masses against the quality wind. The following are four examples of Mao's talks in this period. On July 30, 1961, Mao wrote a letter to Jiangxi Communist Work University for its third Anniversary:

I completely support your cause. [Your students] work part-time and study part-time. [Your university] does not need one penny from the government and has primary universities, middle universities and university. [Your campus] built on top of mountains, rarely occupies farm lands. Such a university is really wonderful. Furthermore, the party, government, worker union, youth organizations and women's organization should run their universities as part-time work and part-time study (CEI 1983, p. 296).

On Feb. 13, 1964, Mao told some top leaders that:

At present, there is too much studying going on and this is exceedingly harmful. There are too many subjects at present, the burden is too heavy. It puts middle-university and university students in a constant state of tension... Throughout history, very few of these who came first in the imperial examination have achieved great fame. ... Only two of the emperors of the Ming Dynasty did well. ... One was illiterate and the other only knew a few characters. Afterwards, in contrast, in the Chia-ching period, when the intellectuals had power, things were in a bad state, the country was in disorder. ... Our present method of conducting examinations is a method for dealing with the enemy, not a method for dealing with people. It is method of surprise attack, asking oblique or strange questions. This is still the same method as the old eight-legged essay. I do not approve of this. It should be completely changed (Mao 1975, pp. 203-4).

On December, 21, 1965, Mao said:

Now about university education. From entering primary university to leaving college is altogether sixteen or seventeen years. I fear that for over twenty years people will not see rice, mustard, wheat or millet growing, nor will they see how workers work, nor how farmers till the fields, nor how people do business. Moreover, their health will be ruined. It is really terribly harmful. I said to my own child: You go down to the countryside and tell the poor and lower-middle farmers, My father says that by studying a few years we became more and more stupid. Please, uncles and aunts, brother and sisters, be my teachers. I want to learn from you (Mao 1975, p.236).

On August 1 of 1966, Mao wrote a letter to the Red Guards of Qingha University Middle University:

I have received both the big-character posters which you sent on 28 July as well as the letter which you sent to me, asking for an answer. The two big-character posters which you wrote on 24 June and 4 July express your anger at and denunciation of, all landlords, bourgeois, imperialists, revisionists and their running dogs who exploit and oppress the workers, farmers, revolutionary intellectuals and revolutionary parties and groups. You say it is right to rebel against reactionaries, I enthusiastically support you. ... Here I want to say that I myself as well as my revolutionary comrades-in-arms all take the same attitude (Mao 1975, p.260).

A mass rebellion was encouraged by Mao.

¹⁰ The problem of quantity growth vs. quality control still exists. This is the reason I discussed this issue with the deputy director at the National Educational Research Center of SEC when I started my field work. In general, the quality concern has dominated China's higher education after 1976 although the quantity wind blew a while in 1992-1993.

¹¹ An example of this is the changed statement of the goal of China's economy reform that I summarized in Table 3.2.

Table 3.2 The statement of the goal of the economy reform, 1977-97

Year	The statement of the goal of the economic reform
before 1977	a planned economy
1977-1982	a plan-dominated economy with commercial adjustment
1984-1987	a planned commercial economy
1987-1992	a planned commercial economy combining both plan and market mechanisms
after 1992	a socialist market economy with Chinese characters

Source: Data from "shisida" (China News October 16, 1992).

¹² From my field notes. This meeting was held at HUST in October, 1995.

The Campus of HUST

The major feature of the campus of Huazhong University of Science and Technology is that it was designed as an independent and self-sufficient unit and all people of HUST work and live in it. Men and women of HUST usually call the campus *home*. For students, HUST is a boarding school, they live on the campus during their period of study at the university. For staff, most work and live on the campus from the moment they enter HUST for the rest of their lives. This “home” is very large with 33,000 members. Truly it is a small society. But it is different from a society since HUST is a specialized organization, a university. It is actually *a working/living community under an single authority*, which refers to the fact that all members of HUST work and live together under the university authority. This is a basic organizational feature of HUST.

This chapter has five sections. Section 1 is about the location of HUST. It explores the environment of HUST from perspectives of geography, culture, economy and politics, and why the HUST founders selected the particular site. Section 2 describes the front entrance, the “face” of HUST. “Face” is important in Chinese culture for both individuals and organizations. Because “face” is a self-image, this description is intended to give the reader a picture of what HUST wants to be. Section 3 analyzes the architectural features of the campus and compares it with the Beijing Imperial Palace, a masterpiece in Chinese architecture history. This analysis shows the cultural umbilical cord of this new university with the traditional China. Section 4 studies the campus as a workplace that provides the work conditions of HUST. Section 5 is about the social features of the cam-

pus as HUST is a small society. With this information, we then investigate HUST's administration in the following chapters.

The Location: Space and Philosophy

HUST is located in Wuhan City, the capital city of Hubei Province (see Figure 3).

Hubei Province is in the central region of China and the middle reach of the Yangzi River. China has three great culturally important rivers: the Yellow River in the north, the Yangzi River in the middle and the Pearl River in the south. In ancient times, the Zhou culture or "north culture" developed along the Yellow River. The representative philosopher of the Zhou culture was Confucius, the originator of Confucianism. Along the Yangzi River three cultures developed, the Bashu in the upper region, Chu in the middle, Wuyue in the lower. These three are called "the south culture." During the Zhou Dynasty (1100 B.C.E - 223 B.C.E), Chu was the most developed among the three in the south. The representative philosopher of Chu culture was Laozi, the founder of Taoism. It was said Confucius even visited Chu to learn governing from Laozi. That is, at the time of Confucius, Chu had its own well-developed culture that was different from that in the Zhou area. Later, the Minyue culture developed along the Pearl River, and Buddhism bloomed there. Since then, Confucianism, Taoism and Buddhism have become the three major components of Chinese culture. Within this cultural map, Chu represents the culture in the central region of China.

The Chu region covers Hubei Province and the north-eastern part of Hunan Province. The Dongting Lake, a large lake, lies between Hubei Province to the north and Hunan Province to the south. "Hu" in Chinese means "lake." Hubei means "the north of the lake" and Hunan means "the south of the lake." Even today, people in this region proudly regard themselves as the descendants of Chu (Zhang Zhenming 1995).

The Chu region is located on a plain, enjoys a warm climate and has many lakes and rivers. In ancient times, agriculture in this region was very well developed. It was said that

“People under sky will all have enough food if Hu and Guang have a good harvest (*Huguang shu, tianxia zu*).” Because water was not a problem for the Chu people, the collectivist social institutions based on water control and irrigation that developed fully in northern China did not develop in Chu. On the contrary, the dominant ideology was self-reliance. This is a fundamental difference between Confucianism and Taoism. For Confucius, the ideal state was a large clan-based state system, while for Laozi, the ideal state was small with few people. For Confucianism, the best way of governing was centralised control, while according to Taoism, the best government would be decentralised and based on self governance, or local autonomy in modern terminology. The essential concern in Confucianism is the relationship among people, while Taoism concerns the relationship between Heaven (or universe and nature) and the person (Tu Youguang 1995)¹ Although Confucianism was promoted as the official philosophy in the Han Dynasty (206 B.C.E) and was enhanced in the Song, Ming and Qing Dynasties, the descendants of the Chu always interpreted it in their own way. Thus throughout China’s history, new ideas and social reforms usually originated in the south, as did public rebellions.²

Compared with people in the north of China. Chu people are considered idealistic, sincere, rigid and radical. Cai Yanpei, a famous reformer of Chinese modern higher education and a former president of Beijing University, once commented on the characteristics of Hunan (or Chu) people: “The characteristics of Hunans are sincerity and rigidity. They are very conservative in holding onto the old and very radical in pursuing the new. In addition, they are accountable and reliable in tough situations³” (p. 123). These characteristics when put together make have a major effect on an emerging society.

From the last half of the nineteenth century to the first half of the twentieth century, encountering the challenges from the Western industrial civilisation, China changed from a traditional agricultural country to a communist society, a radical change. Many prominent figures from the Chu region promoted this change.

The first two were Zeng Guongfan (1811-1872) from Hunan and Zhang Zhidong (1837-1909) from Hubei. They both were important statesmen of the Qing Dynasty and the most vigorous in pursuing the Foreign Affairs Movement.⁴ They both insisted that China

must protect the essence of its traditions but also should actively learn from the West. To synthesise two different cultures, Zhang made a famous aphorism: “Chinese learning should be its essence and Western learning is its usefulness (*zhongxue wei ti, xixue wei yong*)” (see also Hayhoe 1996, p. 37). That is, China should stick to the essence of its traditions but needs to learn useful knowledge, i.e., science, technology and business, from the West. The purpose of learning from the West was “*self-strengthening*”. In my view, Zhang’s words have formed the outlook of China’s learning from the West. For instance, the CCP defined the goal of Chinese economic reform is “to build a socialist market system with Chinese characteristics.” This actually echoes Zhang’s idea. With this concern, Zeng and Zhang were strongly against the foreign invasions in their time but established China’s first Western-style industries and schools. Zhang named one of his schools “Self-Strengthen School”, which later became Wuhan University. Zeng and Zhang were dissatisfied with the Qing Empire but they protected it by repressing public rebellions.

However, Zeng and Zhang did not save the Qing Dynasty. A political rebellion ended it in 1911, and China became a republic. The rebellion began in Wuzhong, the south part of Wuhan. The backbone of the rebellious troops was the New Army, trained by Zhang’s Western-style military schools. About forty years later, another strong figure stood out from Hunan and changed China from a republic to a communist country. It was Mao, an admirer of Zeng (Schram 1992). With this colourful cultural heritage of Chu in mind, let us look at Wuhan, the capital city of Hubei Province.

Its location gives Wuhan an important position in China. Wuhan is located at the middle point of the Yangzi River, China’s major shipping route linking the east and the west and the middle point of Jingguang Rail (Beijing-Guangzhou), the major railroad that links the north and the south. Both routes are very important ones in China’s transportation network. Located in the middle of both, Wuhan is at the centre of China. In Chinese, “the centre of China” is pronounced as “Huazhong.” This is the key word of Huazhong University of Science and Technology.

Wuhan is a large city with a population of four million. The Yangzi River and Han-jang River meet at Wuhan and divide it into three towns: Wuchang, Hankou and Hangyang. Wuchang is on the south shore of the Yangzi, Hankou on the north, and Hanyang is the area between the Yanzi and Hansui (see Figure 3). Wuhan got its name from the combination of the first syllable of the three towns: Wu- and Han-.

During the period of the nineteenth and the first half of the twentieth century, most governments and universities were located in Wuchang, commercial facilities and entertainment sites were established in Hankou, and Hanyang was full of factories. These features remained until 1949. After 1949, Wuchang took Hanyang's place as the major industrial area in Wuhan. Many heavy industry factories have been built along the south shore of the Yangzi River. This is a reason that HUST was established in Wuchang (HUST 1993).

HUST is located in the Guanshan area, in the east end of Wuchang. Gunashan is twelve kilometres from downtown Wuchang. A distance of twelve kilometres is just a ten minute drive in Westerners' eyes, but with the poor public transportation of Wuhan, this distance causes huge inconvenience for HUST residents. It takes half a day for people from HUST to shop at downtown Wuchang or a whole day if they cross the river to Hankou. Thus, most HUST residents do their daily shopping on the campus. The university had to prepare social services for them. However, HUST's location has at least one benefit for its residents. At the back of the campus, about one kilometres away is the East Lake, the largest public park in Wuhan. HUST people can spend their spare time in the park. An interesting question is: why did the founders of HUST select such an inconvenient location? According to the HUST history book, the reason was:

[This location] has a hill behind and a lake beside it. The environment is very peaceful and good for a university campus. Besides, this area had a wide open field, good for further development of the university (HUST 1993, p. 2).

In fact, many Chinese universities established in that period were located far from central urban areas (Jiang Jinghua & Pu Zhonghe 1995, p. 7). In other words, there was a pattern.⁵ Where did this pattern originate? Likely it is from an idea in ancient China of the ideal location for higher learning. That is, higher education is to educate the social elite; therefore a place far from secular life will create an ideal environment that will be favourable for moral as well as intellectual education. This is what the word “peaceful” means.

As could be expected, this distance functioned well during the 1980s when various social activities swept university campuses. The students of the universities close to or in the downtown areas spent more time on the street and less on study. On the contrary, HUST students concentrated more on study. Thus, HUST won a reputation in Wuhan: “HUST is the place for study (*xue zai Huagong*)” (HUST 1993, p. 226).

Clearly, the environment of HUST is special. HUST is located in the Chu region and benefits from the economic and political importance of Wuhan. To build an “ideal” university, the founders selected a place far from the downtown which geographically distanced HUST from secular life, creating a “pure” environment for study.

The Front Entrance: The “Face” of HUST

The “face” of HUST is its front main entrance. It is well known that Chinese care about “face.” In China, from the state to individuals, all care about “face”. What does “face” mean in Chinese culture? We may get millions of definitions from the very rich studies of “face” (for examples see Lin Yutong 1938, pp. 195-203; Qu Xuewu 1994). To my understanding, in regards to oneself, face is a self-image based on self-esteem, and, in regards to others, “face” is a show of social status based on one’s self-image. “Face” presents what one wants to show others about oneself — the shining part of oneself. From this viewpoint, “face” can be seen as one’s self identity and shows how important or special one imagines oneself to be.

In most cases, the “face” of a university usually is its major entrance, consisting of a front gate, a square, a group of buildings and certain decorations. Chinese universities spend considerable money, time and energy on their “face.” If a university changes, it will change its face to match these changes.⁶ There are many ways to make an impressive face, e.g., a huge front gate, expensive building materials, a special name plaque, particular statues and ornamentation, a wide square, huge buildings and so on. Now let us inspect HUST’s “face.”

HUST’s face consists of three parts: a front gate, an eight-floor building and a wide square between the front gate and the building (see Figure 1). Getting off a bus at the HUST Station, one can see the front gate. It is huge. Four square poles, the lower two at the sides and higher two in the middle, divide the gate into three doors: a main door and two side doors. The two poles in the middle are five meters high. Each of them has a decorative sculpture on top, a star surrounded by gears, wheat heads and flags. They symbolise the Chinese Communist Party, worker, peasant and revolution respectively. On the face of the right one, there is a set-in marble slab. On it are six big golden Chinese characters in Mao’s calligraphy.⁷ This is HUST’s name. The main gate of HUST, about eight meters wide, is always locked. I never saw this door open in my eleven years at HUST. The two side doors are smaller, each about two meters wide. People go in and out through the two doors, one the entrance and one the exit. Beside the side doors are two gate houses. They are real houses. Guards rest and sleep in the houses as this gate is the only one open 24 hours a day. Usually three or four gate guards are on duty to prevent unauthorised entrances. HUST has six other gates, three at the front and three at the back of the campus. These doors are all closed at night and opened in the morning and are also guarded, but to a lesser extent than the main gate.

The HUST campus is about 2.67 square kilometres and is walled. That is, nowhere can one enter HUST except through the seven doors. The wall surrounding the campus is 2.5 meters high and made of stone and brick. The Yujia Hill is at the back, serving as a natural back wall. The last piece of wall was built in 1994. In short, this is a completely

closed campus; the wall and doors completely separate the campus from the outside world. This is one of the most important infrastructures in maintaining campus management. It should be noted that HUST is not an exception. Most Chinese universities have a walled campus. In contrast with the openness of American and Canadian university campuses, a professor commented: "There are two types of campuses: open and closed to society. Our campus is like a manor of the Middle Ages."

However, HUST was not built in the Middle Ages, so, why the wall? When I presented this question to a former vice president, he recalled:

In its early years, HUST had no wall at all. At that time, HUST had to put all of its money into teaching and residential buildings. For this big campus, it was impossible to get money to build a wall. So, at that time, HUST was an "open university" as you said.

However, in the 1970s, two things changed this situation. First, the farmers around the campus re-farmed the land that HUST had purchased from them. This re-farming was supported by a government policy. After they had sold it, farmers could re-farm lands that had not been used for three years. The school could not afford to build houses on all of its land; thus it had to re-purchase the land every three years. HUST bought some pieces of land up to three times, costing a lot of money. So, HUST decided to "use" its land, that is, to build a wall to protect its property.

The second reason is relatively simple. The society was disrupted during the Cultural Revolution. Outsiders always invaded the campus, playing around and even stealing things. This disrupted school work. The university had to protect itself from the outside world. So, in the 1970s, HUST began building a wall.

Clearly, as at Oxford University and Cambridge University in the Middle Ages, the instability of the social environment was the main cause for the universities to build their

walls. However, once the wall was built up, it did not just offer protection from invasion but also it made it easier to maintain a specific educational environment.

Actually, wall as architecture is very meaningful in China, from the Great Wall to a small wall of the Beijing compound. Walls can be seen everywhere in China. China is divided into many closed, separated units by walls. It seems that Chinese people protect themselves by walls, rather than by laws. HUST built its wall as a mark of land-holding and self-protection. If the security of the campus and the ownership of land could have been protected by law, HUST might still be open. This calls for a study of the concept of ownership of property and related practices in China. Such a study would reveal some interesting and important aspects of Chinese traditional collectivism.

Entering by the front gate, there is a wide open field, one hundred fifty meters wide and seventy meters deep, with a public square in the middle and wooded gardens at both sides, separated by flower beds. At the front part of the square, there are two stainless frames. Four Chinese words are on the frames: *Unity, Realism, Strictness, Initiative*. This is the motto of HUST. Some think it is an imitation of the motto of Kangda (the Chinese Anti-Japanese Military and Political University) as Kangda's motto was: *Unity, Alertness, Earnestness, Spiritualism*. In terms of form it could be true because this motto was adopted under Zhu Jiouzi, a graduate of Kangda and the former President and the General Party Secretary of HUST. But in terms of meaning, it is not true as it is a summary of HUST's experience (HUST 1993, pp. 227-228, pp. 332-335) Thus this motto presents HUST's identity as well as taking the form of Kangda's motto.

Another symbol which presents HUST's identity is the statue of Mao. This statue on its base is about fifteen meters high and is at the centre of the square. This statue was built during the Cultural Revolution. During that period, all universities built a statue of Mao and put it in their major public place. But after the Cultural Revolution, most of them were destroyed in the name of anti-individual-worship. Only a few schools still keep them. HUST is one. This is very rare in today's Chinese university campuses.

From the ornamentation on the top of gate, to the school motto, to Mao's statue, all convey a very clear idea that HUST takes the ideology of the Chinese Communist Party as its official identity.

The third part of the face of HUST is an enormous building standing behind Mao's statue. This is a teaching building with a modern square-box style. This building is more than one hundred meters wide and thirty meters high, the largest building on the campus. It is like a big wall facing the outside world and hiding the campus behind. This building represents the momentum of HUST. The official name of the building is: South 1 Building or in short, S1. HUST people simply call it "the major building."

On the lintel of the front door of S1 hangs the emblem of HUST. This is a pentagon, the S1 figure in the middle, a Rutherford model of the atom above and the HUST name at the bottom. The pentagon represents the five universities which contributed their departments to HUST in 1953, the atomic model symbolises science, and the S1 figure represents HUST. This emblem is a symbol of the identity of HUST. It is interesting to note that there is no symbol for engineering in the emblem although HUST is an engineering university. If taking science as theoretical knowledge and engineering as practical knowledge, one may say that HUST emphasises theoretic knowledge more than practical knowledge. This is a typical Chinese view of knowledge, that is, theoretic knowledge is more essential than practical knowledge in higher learning (see Hayhoe 1989, Chap. 1).

From the front gate, through the square to the S1, this is the "face" of HUST. By reading this face, one can read four messages:

- HUST is an important university.
- HUST takes the ideology of Chinese Communist Party as its ideology.
- HUST respects unity, realism, strictness and initiative.
- HUST respects science or theoretical knowledge.

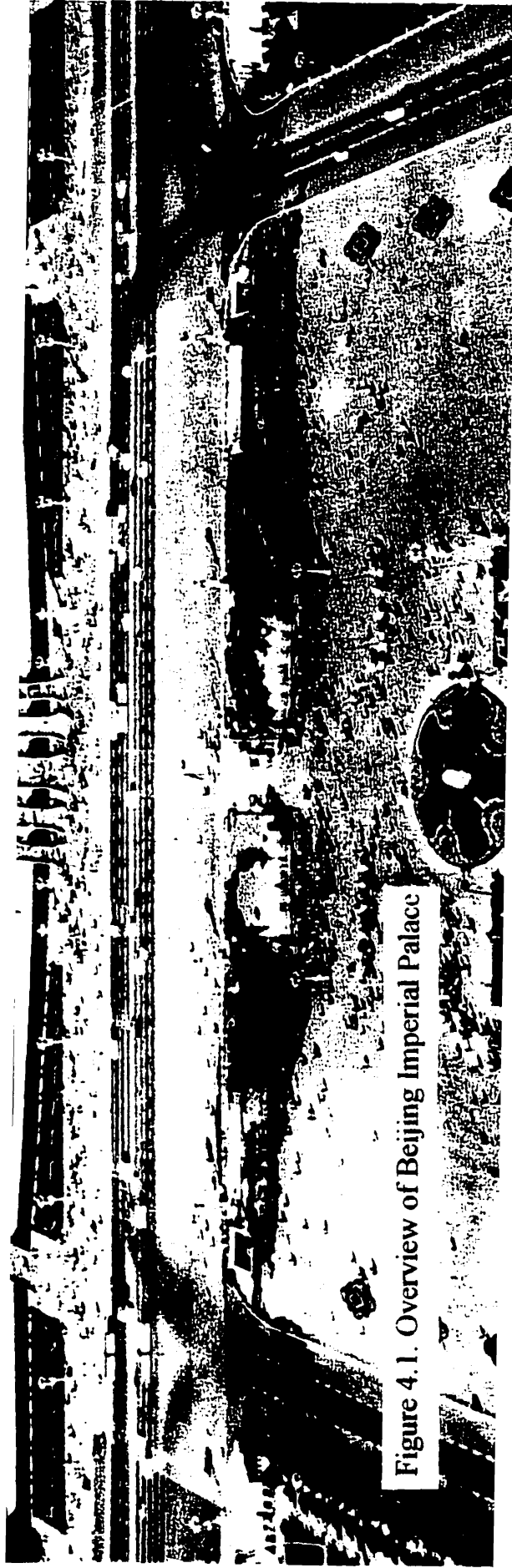


Figure 4.1. Overview of Beijing Imperial Palace

All of the above represent the formal identity of HUST. The informal identity can be found in the university architecture.

The Campus: Architecture Linking with Tradition

The campus can also be seen as architecture, which reveals HUST's identity as well. Now let us study the campus and compare it with the Beijing Imperial Palace, a masterpiece in Chinese architectural history, built in 1406-1420. By this, one can find how this new university is linked to traditional China.

First, the campus faces south and has a hill behind at the north. If one stands on the top of the hill and faces south, one sees an open field. At the end of the vista is wide water linking with the sky. In the view of *fengshui* (which literally means wind and water), an ancient Chinese philosophy of architecture, this is an ideal design, called “*sets at north and faces south*” and “*have a mountain behind and have an open space in front.*” The back walls will protect the house from the cold wind from the north and sunshine from the south will warm the house. Warmth represents luck and fortune, and cold represents the absence of luck and fortune. The hill implies stability of business and the open field gives a place for future development. This principle was adopted by the Beijing Imperial Palace. Thus both occupy good *fengshui* and so were wished good fortune for the future. This principle is about the relationship between the universe and the person.

Second, “*concentrate in the middle and seek a balance at the two wings*” is another feature in Chinese traditional architecture, but this conveys a more social and political sense. This is from the idea of Means, the golden principle of Confucianism. Axial symmetry is a typical architectural principle in China which concentrates on the middle, seeks a balance between east and west and conveys a sense of centralisation. In studying the maps of the HUST campus and the Beijing Imperial Palace, this principle is very obvious.

The HUST campus is quite square. From the front gate through the wooded gardens, two roads, like open arms, stretch into the campus. The S1 stands at the centre of the front

part and divides the campus into western and eastern regions. Other buildings are basically distributed in axial symmetry. Buildings for teaching, research and administration are all located in the central area and the student residences are at both sides. There are a total of twenty-six dormitories for about 17,000 students, eleven at the east, fourteen at the west and a foreign student dormitory in the middle. Each of the student living areas has its own sports ground and other facilities. Students eat at seven dining halls, four at the east and three at the west.

Third, “*business in the front and residence at the rear*” is another architectural principle in ancient China, which implies that an architecture should be designed to meet the needs of both working and living. Thus, this principle delivers a sense of independence and self-sufficiency. This principle was adopted by both the Beijing Imperial Palace and HUST, too. In the middle of the campus is a commercial street that divides the campus into the front and rear regions. The front region is for schooling and the rear for residence; residential buildings and other living facilities, e.g., commercial sites, the kindergarten, the primary school, the secondary school, school hotels, the university hospital. People simply call it “the living area.”

In addition to the three major characteristics of HUST’s architectural lay-out, some others are:

- Buildings share unified styles. All business buildings are light grey with a square-box style. Teachers’ residences are light grey, too, but with either a flat or peaked roof. This implies *unification*.
- Most roads on the campus run in either a north-south or an east-west direction. The matrix-like road system implies *strictness*.
- The walled and well-guarded campus creates an impression of *dignity*.

Now we can see how many similarities are shared by the two architectures. The major difference between the two is that HUST’s design did not follow these principles as

strictly as the Beijing Imperial Palace. The reason could be very simple: the HUST campus is not an imperial palace.

One has reason to wonder why the HUST campus shares so many similarities with the Beijing Imperial Palace. I think the architects of the HUST campus consciously and/or unconsciously practised the principles that were used in the Beijing Imperial Palace because these principles represent China's traditional philosophy and aesthetics in architecture. These principles are the cultural umbilical cord of this new university with traditional China.

The Campus: A Workplace

From the west-sloping road into the campus, one can see two buildings on the western side. The second is the administration building of HUST or S3 (South 3 Building). All major managerial departments at the university level are in this building. Thus, S3 becomes a symbol of the management of HUST. S3 is a five-floor building, rectangular, light-grey and unimpressive. Most offices are on the south side and their doors open onto a long corridor. Each floor has about fourteen offices and a meeting room at the east end. The lobby is on the ground floor. Facing the front door in the lobby there is a big mirror. It seems to remind people: "Do you dress well?"

HUST has two administration systems: the presidential system and the CCP system. Each of them takes care of several functions. The presidential system is responsible for teaching, research, support services, finance, and personnel. The CCP system is responsible for the party administration, administrator personnel, propaganda, student affairs, campus security, and united front works (for detail see Chapter 11). The presidents and the party secretaries occupy the second floor. Other offices are located in the building according to the visiting frequency by students and staff. For instance, the departments of finance and research, often visited, are on the first floor, teaching affairs on the third, propaganda, personnel and cadre personnel on the fourth, and campus security and student affairs on the fifth floor.

Most offices are the same size, 3.5 meters wide by 4.5 meters long. Three or four people share an office. Even the director of a department has no independent office. They may at most separate a semi-independent space for themselves with furniture. Each officer has a desk and a chair of plain wood. Each office has only one telephone for all the officers. Only university leaders enjoy some privileges: each of them has their own office and telephone. Most offices have no computer, including those of the university leaders. That is, HUST did not have a computer-based management information system in 1995. Some departments like finance, research and teaching affairs have one or two computers and a photocopy machine, but these are shared by all offices of the department. On the entire campus there are only two fax machines for management. Officers do their paper work in a traditional way.

If one goes into a teaching building, one can see that most teachers have no office. Teachers teach in the classroom and do preparation at home. That is, home becomes a part of the workplace. As a consequence, teachers have no office hours for students. When they need help, students simply go to the teacher's home and knock on the door. Fortunately they all live on the campus, so home visiting is not a problem.

The Campus: A Small Society

This campus has 33,000 residents, 17,000 students, 14,000 staff and their families and 2,000 casual workers. People work and live on the campus. Thus, HUST not only needs a system for academic activities but also a system for living support services. This makes the campus a small society with some special social features. Six of them are important.

The first feature is its huge and complete living-support service system. To support these people's lives, HUST built 200 residences with 4,444 apartments. HUST also has various social service institutes, e.g., a child-care system with a kindergarten, a primary school and a secondary school, a hospital equipped with more than 100 beds, a food supply system with several dining halls and food processing plants, a reception system with three

hotels, a living-support system with a water station, a natural gas station, two power distribution systems (one for schooling and one for living), three public bathhouses, four heating stations and a transport team with 132 vehicles. In addition, the school has a telephone system, a cable TV system, a campus cleaning team, a construction system, a campus security system and a publishing house with its own printing press.

External service systems also establish branches at HUST. There are two bank branches, a post office, a grocery store, a hairdresser, a book store, a food store and two restaurants. Many collective or private business people also run their businesses on the campus. HUST has two commercial streets with more than 130 commercial sites. Farmers near HUST sell their produce to HUST staff, e.g., fresh vegetables, meats and other foods. These are important for the staff's dinner tables. To promote these businesses, HUST built a large public market. Hundreds of farmers sell their wares to HUST inhabitants in the market every day and most HUST families buy food at the market. After work, the market is the busiest place. People bargain with each other. Friends meet at the market to discuss common interests and exchange information. Not surprisingly, HUST has a market administration office there.

With such a complete living-support system, the campus *is* a small society. People joke about this with pride and irony: "One does not need to go out except at death." But the President dislikes it. When I asked him what the major difference is between Western and Chinese university management, the first words from him were: "I am a mayor, not a president."

Territorialism is the second social feature. It is very obvious. Many faculties and departments raised money to build their own buildings, and thus their building are called the Electrical Engineering Building, the Power Engineering Building, the Laser Laboratory Building and so on. They hire casuals to guard and clean their buildings. Some institutes build a wall to protect their territory. For instance, the kindergarten, primary school and middle school built a wall to protect their territory and do not allow outsiders, even parents,

into their realm. They say that “parents may disrupt the school’s work.” Some institutes (e.g., the school publishing house and the architecture institute) circle their land with a short wall. Even units who share the same building have a strong sense of territory. If you invade a place, someone may come up to you and ask: “Who are you looking for?” (similar to “May I help you?” in English). They know you are an intruder.

Another feature is non-individualisation. On this campus, no building has been named after a person. A good example is the library. Mr. Shao Yifu, a Hong Kong businessman, donated ten million Hong Kong dollars to HUST for the project, but this library was called the HUST Library rather than Shao Yifu Library. As well, no one’s picture can be seen in a public place as a memorial. In short, any sign that is related to individual-worship is forbidden. This is so strong that Zhu Jiusi consciously announced first that he had “no intention to praise himself” when Ruth Hayhoe, a Canadian scholar, asked him to talk about his work when he was the school leader (Zhu Jiusi 1992). The only exception is Mao’s statue, as Mao was the founder of communist China. Thus, non-individualisation is the third social feature of the campus.

The fourth feature is the geographical social hierarchy. People with the same rank live together, in the same building and in the same block. This results from the policy of HUST’s residence place assignment (for details see Chapter 8). Full professors have a four-bedroom apartment, associate professors have a three-bedroom apartment, lecturers have a two-bedroom apartment, and teaching assistants have a one-bedroom apartment; single teachers live in teachers’ dormitories. The same-size apartments are built in one building, and the same style buildings are usually together. Consequently, the social hierarchy is geographically visible. It is the same for students. Different kinds of students live in different buildings and in different blocks.

The fifth feature is home visiting. As mentioned, most teachers do not have offices and therefore have no formal office hours. Furthermore, many teachers have no personal telephones.⁸ Thus, students visit teachers’ homes for help. Such visiting usually is

unscheduled. One just goes and knocks on the door! The best time for home visiting is in the evening. Some professors simply give lectures at home, particularly for postgraduate students. In such cases, students may enjoy a lecture with a cup of tea, fruit or even be invited to have dinner with the teacher's family. Teaching, therefore, is very intimate. Students may visit their favourite professors to seek advice for personal issues. Professors may look for a son- or daughter-in-law among their favourite students. When teachers need help for physical work such as moving, students are asked first. The relationship between some teachers and students is very close. This kind of friendship may last for a lifetime.

Similarly, teachers and administrators visit each other for work and/or friendship. As home visiting occurs in a private place, it is the best way to deal with difficult or highly secret issues. For instance, if a professor is very disappointed by an administrative decision, the department chair usually visits his/her home and provides an "explanation" in order to make the professor happy. Similarly, if an administrator wants to seek support from others on an important decision, s/he had better to do some "homework" before the meeting. In such cases, home-visiting becomes a managerial tool. A dean commented, "I bet that the most important decisions of HUST are not made at the office but at home. If an agreement on a difficult decision cannot be reached at home, it will be even more difficult to reach at the office."

The sixth feature is the fully developed interpersonal network. Most staff work and live on the campus for a lifetime. A complex interpersonal network is inevitably developed on the campus. People know each other for many reasons. Some come from the same home town, some graduated from the same department, some work in the same unit, and some have children in the same class at school. HUST has a history of forty-three years. About eighty percent of the teachers and administrators are graduates of HUST. Most of their spouses and many of their children work or study somewhere at HUST. One can understand, then, how a complex interpersonal network has developed on the campus. The longer one stays at HUST, the deeper one is involved in the interpersonal network. These connections can be a source of aid when one needs help, but also can be a source of

problems when one cannot or does not want to offer help. But keeping a good relationship with everyone is always smart.

These six features make the campus a small society. It has an almost complete in-house service system which makes HUST not *purely* a workplace. The territorialism and non-individualisation convey a collectivism that is close to China's traditional clan collectivism. The social hierarchy is geographically visible. Because teachers usually work at home and many of them have no telephone, home visits become a common connection style. Clearly, a complicated interpersonal network has been developed on the campus. All these serve as the base of HUST's management.

What have we discovered from our look at the campus? We saw that HUST is a working/living community as people work and live on the campus. This makes the campus different from a pure workplace. This is a distinct organisational feature of HUST.

We saw the formal and informal identity of HUST from its main entrance and its campus architecture. From its main entrance, we observed HUST's formal identity that includes: HUST is an important and huge university; HUST takes the ideology of CCP as its ideology; HUST respects unity, realism, strictness and initiative; and HUST emphasises science.

By reading the campus architecture, we found the cultural linkages of HUST with traditional China. HUST selected a *peaceful* location which is far from secular life although this selection has caused inconveniences for its residents; HUST shared many architectural features with the Beijing Imperial Palace. These features convey China's traditional beliefs (e.g., good wishes for business), life style (e.g., business in front and residence at rear) and managerial philosophy (e.g., seeking balance and centralisation).

As a workplace, teachers' workplaces extend from classrooms or office to staff homes. At HUST, work and private life have been merged. No one can draw a clear line between work and private life. Work and life woven together is the lifestyle of HUST. In comparison with the Western universities, its material facilities for management are poor and its management is carried out in traditional ways.

As a community, the campus is like a small society. HUST provides in-house living-support services for its members. This makes HUST highly self-sufficient. Like any small community in China, the HUST community shows special social features like geographical social hierarchy, territorialism, non-individualism, collectivism, a complicated interpersonal network, home visiting and so on. They exist as the result of the institutions of the HUST community and serve as the basis for HUST's management.

All the above exist in the east corner of Wuhan City, the capital city of Hubei Province and the realm of Chu. The Chu people are alleged to have distinct characteristics. They are said to be independent and prefer self-sufficiency; they are idealistic and rigid, sincere to their traditions but radically pursue the new. As an individual, Mao clearly had these characteristics. Some HUST people also bear these characters, for example, Zhu Jiusi, the formal President and the General Party Secretary of HUST.

This is the campus of HUST.

¹ On this issue, I am greatly indebted to Tu Youguang, a professor of HEI. I have learned a lot of Chu culture and philosophy from him in the past twelve years.

² See *The Spirit of the People of Chu* in History of Chinese Philosophy (Fung Yulan 1952, vol. 1, pp. 175-176) and History of Philosophies in the Chu State (Chuguo zhexue shi) (Tu Youguang 1995).

³ In ancient times, a person who represented Chu people's characteristics was Qu Yuan (340 B.C.E? - 278 B.C.E), a priest and officer of Chu State. He predicted that Qing State would attack Chu State and suggested that the King of Chu made alliance with Qi State to protect Chu. But the King did not take his suggestion and expelled him. When he saw that Chu was defeated by Qing State, Qu Yuan threw himself into a river. He left several poems, expressing his love for Chu and his loyalty and anger with the King. It was said that his death shocked the local people. They boated to the place where he drowned to retrieve his body. This is the origination of the Dragon Boat Race in China. His poems were collected and named Poetry of Chu (Chu Ci). Later Poetry of Chu became one of the most influential collection of poems in China's literary history, parallel with the Book of Poetry (Shi Jing), a collection of poems collected and edited by Confucius. The poems in Book of Poetry were about the daily life of the Zhou people, and were the origins of the realistic tradition of poetry in China. The main body of Poetry of Chu was conversations between Heaven and the person. Therefore Poetry of Chu was considered the most idealistic, mystical and romantic set of poems and began the tradition of the mystical and idealistic poetry in China (Xu Yuanchong 1994)

⁴ The Foreign-Affairs Movement was a movement to learn the Western technology and culture, launched by some top officials of Qing Dynasty and favored by the emperor in the last half of the nineteenth century. This movement was also called the "self-strength" movement. During this movement, China established its first Western-style industries and educational system (Fairbank 1994)

⁵ An example is Beijing University which was moved from Beijing downtown of to the suburbs after 1949.

⁶ A typical example of this is the set of changes to the main entrance of Beijing University from 1898 to 1995. A study of these changes over the years would be very revealing.

⁷ This is a fashion that takes the calligraphy of top leaders for a school name. In the time of Mao, Chinese universities favoured Mao's, and in Deng's time, some universities took Deng's calligraphy, for example, Huaxi University of Medicine at Chengdu City.

⁸ HUST had a total of 6,300 staff in 1995, but only 1,252 individual telephone numbers were listed in the school telephone directory.

A Boarding University for the Elite

Chapter 3 noted that Chinese higher education is an elitist system. HUST is the “elite of the elite,” being ranked in the top ten of all key Chinese universities. This position influences all aspects of HUST’s management. This chapter will illustrate how this elite position influences its student management.

This chapter has six sections. Section 1 is a case study of the 1995 new student recruitment of HUST. Section 2 is about the welcoming activity. This activity is in my view a ceremony of transferring new students from their parents’ to the university’s care. Section 3 is a report on the military training of the new students because the major purpose of this training is to prepare students for boarding school life. Section 4 is about the student management system and its daily operation. Section 5 is about graduate job assignment. Special attention is given to graduates and interregional migration which as we will see is a social function of HUST.

Recruitment

Recruitment is important for knowing the nature of Chinese elite higher education because it shows how China selected youth to receive higher education. In this section, I address three topics: the national entrance examination, how HUST competed with other universities for the best students, and who eventually entered HUST.

National Entrance Examination: First Step to Enter Universities

China holds a national unified entrance examination to select youth for higher education. Before 1952, universities selected students on their own, with no unified national entrance examinations. After 1952, China began to select university students by using a unified national entrance examination. This entrance examination is a *trademark* of the quality wind as it is the first step in quality control. Thus this tradition was broken in the periods of 1958-1961 and 1966-1976 as the quantity wind dominated the two periods. (CEI 1983)¹ In 1977, the quality wind once again dominated China's higher education (for details see Chapter 3). Thus, the national entrance examination was restored.

This examination is held solely by the State Education Commission of China (SEC). The SEC plans the amount of recruitment each year, determines the criteria of candidates' qualifications, exam subjects, work procedures and schedule. Thus this examination is a national unified selective examination.

Recruitment Plans. A basic assumption of the quality wind is that China's higher education system is an expert-training base for China's modernization. Therefore, the plan of higher education recruitment is a part of the entire socioeconomic plan of the nation as well as those of individual provinces and industries. Thus, like China's other socioeconomic plans, the SEC makes three kinds of recruitment plans, long-term (ten years or more), five-year and annual, at the national and provincial/ministry levels. Among the three kinds of recruitment plans, the annual plan is the operational plan.

As a general principle, the national plan guides the provincial and industrial plans. The individual province's and ministry's plan guides their universities' plan. These plans are called the national, province/ministry and university plans respectively. For instance, the SEC, representing the central government, makes the national plan and also as a ministry makes a ministry plan for its universities. Then, HUST as a SEC university makes a university plan.

In practice, the annual planning process has five steps:

- The SEC sets a guideline for student recruitment for ministries and provinces.
- Ministries and provinces make a guideline for their universities.
- Each university makes a draft plan and sends it to its top authority for approval.
- Based on its universities' plans, a province or ministry makes its plan and sends it to the SEC for approval.
- Once the SEC approves these plans, they are in effect.

All of these plans are very detailed. They clearly state the specialty, amount and where students should be recruited. For instance, the 1995 plan allowed HUST to recruit 2,415 new students for its specialties (or programs). Of them, thirty were recruited from Guizhou Province, five in mechanical engineering, three in computer science and two in economics and so on. The sum of recruitment of all universities which recruit students in Guizhou Province becomes the recruitment quota for Guizhou Province. The Guizhou Province's plan could be for instance a total quota of 10,000 students. Of these, one hundred would be in computer science, two for Qinghua University, three for HUST, forty for Guizhou University, with the remainder for other universities.

Obviously, the higher the quota a province has, the more educational opportunities the students from that province have. Thus, each province tries to get a higher quota in the national plan. As to the key universities, the quota distribution for a certain province depends on two factors:

- How many key universities are located in the province because they usually keep a higher quota for their home province.
- How many students the key universities want to recruit from a given province. In general, key universities recruit more students from the more developed provinces.

Thus, a province that is poorly developed and has few or no key universities located in it will have a lower quota for key universities. In contrast, the developed provinces with more key universities located in the province have a higher quota. In such

cases, the SEC plays a protecting role for these difficult provinces by asking the key universities to recruit a certain number of students from these provinces (for the case of HUST see Table 5.1).

After these plans are in effect, the provincial governments announce their plan publicly and recruitment starts. For instance, in 1995, Hubei Province had a total quota of 45,472 students, 17,672 for ministry universities, 21,500 for local universities and 6,300 for adult higher education institutes. It had 109,022 candidates. That is, Hubei candidates who took the national entrance examination would have about 41.3 percent of an opportunity to have a higher education (Yue Chuanlin & Huang Xingguo 1995, p. 20).

Rules of Recruitment. The SEC also makes the rules for qualification of candidates, students' choices of school, exam subjects, exam timetable, and procedures for recruitment.

People who are under the age of 25, single, in good health, without a criminal record, and who have no prior higher education are qualified to be candidates.² Candidates register for the examination only at their resident province. Cross-province registration is not allowed. Each candidate can make three choices of which school they want to attend and what subject they want to study. Schools select students based on these choices. As a rule, no school is allowed to select students from candidates who did not choose the school. A school must have agreement from a candidate if the school asks the candidate to study a subject which the candidate did not choose. These two rules make the choice-making crucial, particularly for students who want to enter a key university, as we will see later.

The 1995 examination subjects for humanities and social sciences were: Chinese, politics, mathematics, foreign language, and history/geography. The exam subjects for science/applied sciences were: Chinese, mathematics, foreign language, physics and chemistry.³ The full score for each subject was 150 points, the total score for five subjects was 750.⁴

The 1995 examinations took place on July 7, 8 and 9, from 9:00 to 11:00 a.m. and from 3:00 to 5:00 p.m. (Beijing time). For the recruitment process in science/applied sciences, the examinations were taken in the following order: Chinese, chemistry, mathematics, foreign language, and physics (ACESP 1995, p. 16). China has no local time system, thus all exams took place at the same time over the entire country.⁵

Local Lowest Score (LLS). After the examinations, each of the local, provincial or equivalent, governments was in charge of scoring the examinations according to the SEC-established standards. Once all scores were in, the local government summed a total score for each candidate from the province, and arranged the scores from the highest to the lowest.

Universities selected students in a given province in the order of special universities (e.g., military institutes), key universities, ordinary ministry universities, ordinary local universities, adult education institutes. Because the recruitment numbers for each kind of universities in the province were fixed, the local government made a "cutoff" score for each category of universities. These scores are called *local lowest score (LLS)*. A key university can *only* select students from the candidates whose total score is higher than the local lowest score for key universities. If a candidate's total score is lower than the LLS for adult education institutes, it means s/he failed the exam.

The LLS for the same category of universities varies over provinces. For instance, in the 1994 examination, the LLS for key universities at Beijing was 468 and at Hubei Province was 590. That is, a candidate from Beijing with a total score of 500 was qualified to enter a key university. But if this candidate registered at Hubei Province, he actually failed the exam as the LLS for the adult higher education institutes at Hubei Province was 565.

Two major factors influence LLSs: the recruitment quotas and the achieved scores of local candidates. The quota is negatively associated with LLSs. That is, if the planned quota in a province is higher, the LLSs will be lower. The planned quota is related to how many higher education institutes are located in a given province. If a province has more higher education institutes, the planned quota will be higher. Achieved scores are associated positively with the LLSs. That is, if the achieved scores in a province are higher, the LLSs will be higher. The achieved scores are related to the quality of provincial secondary education. If a province has a good secondary education system, its graduates will probably achieve higher scores in the exam. An inference drawn from the above is that the LLSs will be higher if a province has a better secondary education system but has fewer higher education institutes located in the province. In other words, LLSs indicate inequality in university entrance in China. The LLSs for key universities in the 1994 examination are listed in Table 5.1.

In 1995, Hubei Province registered its candidates from June 12 to 14, held exams from July 7 to 9, reported to candidates their total scores on July 25 and announced its LLSs on July 27 and 28. Universities selected students from August 5 to September 10 (Yue Chuanlin & Huang Xingguo 1995, p. 222). From this schedule, one can see that candidate registration and choice-making occurred before the exam results were reported. That is, candidates *did not know* their exam results when they made their choices. This makes choice-making something of a gamble,⁶ and gives room for HUST to compete with other universities for the best students. For this, HUST conducted a nationwide recruitment promotion.

Promotion: Competition for the Best Students

For HUST, the most crucial problem was not if it could get *enough* students, but how to get the *best* ones. HUST had two strategies to achieve this. First, HUST had recruiting relationships with 553 key middle schools nationwide since the 1980s (HUST 1993, p. 274).⁷ Second, HUST sent recruitment teams to all target provinces *before* candidates made their choices.

Recruiters, teachers or administrators, were usually originally from the target province. HUST gave these teams full authority on recruitment, and if a recruit team recruited high-score students, HUST gave the team a bonus. For instance, HUST gave 150 yuan, about a half-month's salary, to the team members who recruited a student with the highest score in a province. The budget for recruitment was about 300,000 yuan in 1995.

The basic method to promote HUST is visiting local key middle schools as in most cases, the best students are from these schools. During their visits, recruiters give students information about HUST, and encourage the best students making HUST as their first choice. HUST's recruitment policy states that it will not take *any candidate* who chooses HUST second unless its quota is not filled with first-choice candidates.⁸ That is, HUST takes first-choice candidates first, rather than the highest-scoring candidates first. Why? "We would like to have a student who loves HUST," a recruitment officer said. But, another officer commented: "It is a policy — gambling for the best students!" I consider this comment closer to the intention of the policy from a story a recruiter told. This recruiter did his promoting in Hubei Province. He described his experience:

This year, another teacher and I worked as a team doing recruitment in Xan Region. You know, we were from there. We went down to area on June 9 and came back on the 14th, a total of six days. I covered three counties.

My focus was very clear: Ning High School, the provincial key middle school in the district. I went to the principal and asked for help directly. We have known each other for years. The principal treated me to a dinner. During the dinner, I asked him to give me an opportunity to speak to his students. The principal laughed at me and said: "It is no problem. But you should control yourself a little bit." I knew what he meant. They had their own interests. The school would win a higher reputation if it was able to send more students into the "top three" (Beijing University, Qinghua University, Chinese University of Science and Technology,

—the three best universities in China). Teachers would get a bonus of one thousand yuan for each of their students who were selected by the “top three.”

No doubt that the teachers want to send all of their students to the “top three.” However, there is a problem. In case the students fail to be selected by the “top three,” the students may lose the opportunity to enter the other key universities like HUST. For instance, last year, in Hubei Province, Beijing University had a quota of 68 but got 123 first-choice students. That is, Beijing University could only select 68 students of the 123 students. Qinghua University had a quota of 84 but got 179. Chinese University of Science and Technology had a quota of 40 and got 91. Of course, the “top three” picked the best from their first-choice students. What happened to the remainder? They *died*! In the selection, their files were rejected everywhere. No other key universities picked them as they had to take their first-choice students. They were the best students in Hubei Province, but nobody wanted them. It was really horrible for them. Their fate was clear: either enter an ordinary university or take the exam next year. It is cruel. No one likes it, neither do I!

So, I had to tell students the truth and ask them to have second thoughts about their choice-making. I told them: “If you consider you are No. 1 in the province, you choose the top three. Otherwise, I suggest you do not take the risk because you have no idea how many students in this province consider they are No. 1.”

After my speech, some students came to see me asking for information about HUST. I was also very careful. I only encouraged the students to choose HUST as their first-choice if their average scores in “imitation” exams⁹ were twenty points higher than the possible LLS for key universities. You know, HUST also has to reject some students who make HUST as their first choice. For instance, last year, we had 744 first-choice students but only had a quota of 619. But the chance to enter HUST was over eighty-five percent. The chance is pretty high.

But we have two exceptions made for the children of HUST's staff. First, HUST will take them if they failed to enter the "top three." Second, HUST will take them as long as their scores were above the LLS for key universities. In fact, HUST's lowest score is usually ten to twenty points higher than the LLS for key universities. Thus, this is a favor of HUST to its staff.

Who Entered HUST?

In early August, recruitment teams went back to their target provinces to select students. The result of the 1994 recruitment is summarized in Table 5.1 and Table 5.2, as data on the 1995 recruitment were unavailable.¹⁰ Two things are significant.

First, in terms of the opportunities to enter key universities, one can see HUST recruited its students mainly from the Center-South Region of China (58.2 percent), particularly from its home province (689, about 30 percent). If this observation is applied to all Chinese key universities, it can be concluded the more key universities that are located in a province, the greater opportunities for the candidates from that province to enter a key university.

This conclusion was also supported by the varied LLCs over different provinces. One can see that the LLSs in the least developed provinces, Inner Mongolia (544), Guangxi (515), Guizhou (503), Gansu (506), Qinghai (445), Ningxia (504) and Xinjiang (522), were higher than those in Beijing (468) and Shanghai (440). This is because Beijing and Shanghai have more key universities and these universities recruited more students from the two cities. Thus, Beijing and Shanghai provided more opportunities for their candidates to enter key universities.

Second, there was a big gap between the highest and lowest scores among the students recruited by HUST in 1994. The regional gap was 93 points (522 for Qinghai, and 615 for Hubei) and the individual gap was 271 (407 the lowest, and 678 the highest).

Table 5.1 The 1994 undergraduates recruitment by regions

Region	Recruitment	L.L.S*	Average	Highest
<i>North Region</i>				
Beijing	48	468	522	624
Tianjing	15	508	527	564
Hebei	36	552	577	642
Shanxi	26	525	560	607
Inner Mogolia	14	544	577	607
<i>Northeast Region</i>				
Liaoning	59	N/A.	570	623
Jilin	19	542	555	591
Heilongjiang	21	560	572	615
<i>East Region</i>				
Shanghai	1	440	568	568
Jiansu	149	580	614	667
Zhejiang	50	540	560	601
Anhui	50	528	549	610
Fujian	42	560	582	611
Jiangxi	156	N/A.	594	636
Shandong	6	555	607	631
<i>South central Region</i>				
Henan #	147	658	718	839
Hubei (<i>HUST located</i>)	689	590	615	678
Hunan	228	569	589	644
Guangdong #	102	630	690	808
Guangxi	140	515	533	611
Hainan #	29	658	699	809
<i>Southwest Region</i>				
Sichuan	116	562	590	643
Guizhou	30	503	571	644
Yunnan	51	407	524	603
<i>Northwest Region</i>				
Shaanxi #	26	627	688	771
Gansu	10	506	549	580
Qinghai	10	445	522	551
Ningxia	10	504	538	592
Xinjiang	15	522	550	596
Total	2295			

Source: Data from the original records of the 1994 recruitment of HUST in the HUST Achieve.

* These LLSs were for science and applied science and for key universities.

The four provinces adopted a 900-point evaluation system instead of the 750-point system used by the other provinces. So, the scores in these provinces were relatively higher (see Endnote 3).

These gaps caused two problems in teaching. For teachers, it meant they had to put extra effort into the low-scoring students. For the low-scoring students, they felt great pressure in studying at the beginning and had a hard time to catch up. Some of them may have lost

their interest and confidence. If a student failed to catch up, he or she was asked to transfer to a three-year program at the HUST Adult Education Faculty. If the student still had difficulty in catching up, she or he was asked to withdraw from the university.

Who eventually entered HUST? The students' personal information and the related average scores of the 1994 cohort are summarized in Table 5.2.

Table 5.2 The 1994 cohort by personal features (n=2295)

Personal information		Number #	%	Average *
gender	male	1,819	79.3	588
	female	476	20.7	585
residence	urban	1,429	62.3	586
	rural	866	37.7	589
nationality	Han	2,182	95.1	589
	minorities	112	4.9	564
parents	worker/farmer	948	41.3	591
	cadre/officer	628	27.4	586
	others	36	1.6	581
political status	CCYL**	2,274	99.1	587
	CCP	5	0.2	573
	none	16	0.06	559
study status	current student	1,944	84.7	589
	former student	347	15.1	580
choice	first choice	2,200	95.9	588
	second choice	28	1.2	552
	others	2	0.01	N/A.
average age	18.3	youngest	11	oldest 28

Source: Data from the original records of the 1994 recruitment of HUST in the HUST Achieve.

Some information was missing in the records

* 304 students from the four provinces that adopted the 900-point evaluation system are excluded.

** Chinese Communist Youth League (CCYL)

One can see:

- Males had greater chance to enter HUST, as 79.3 percent of the students were male and 20.7 percent were female. The national ratio of male to female was 51.6 percent to 48.4 percent in 1991 (PRI 1992, p. 343). The males' average score was slightly higher (three points) than the females'.

- Urban students had more opportunities to enter HUST, as 62.3 percent of the students were from urban areas and only 27.7 percent from rural areas. But 73.6 percent of China's population was rural in 1991, and only 26.4 percent was urban (PRI 1992, p. 497). However, the rural students performed better in the exam than did the urban students.
- Students of Han (the major nationality of China) had greater opportunities to enter HUST, as the minority students were 4.9 percent. The national percentage of minorities was 8.6 percent in 1991 (PRI 1992, p. 326). It seemed to result from the poor secondary education in the minority areas. The minority students' score was much lower (twenty five points) than that of Han students.
- The students from worker/farmer families were the largest percentage (41 percent). They performed better (from five to ten points) in the exam than those from any other family background.
- Most students (99 percent) were members of Chinese communist Youth League and five of them were members of Chinese Communist Party. This indicates a strong link between politics and higher education in China.
- Most students (84.7 percent) graduated from middle school in 1994 and a few (15.1 percent) graduated before. The current students had a higher total score (nine points) than the former students.

Most students (96 percent) had HUST as their first choice. HUST only recruited thirty students who took HUST as other choices. The first-choice students performed much better (thirty six points higher) in the exam. This clearly shows the effect of the first-choice-first policy. This effect can also be seen by comparing HUST's recruitment with the "top three" recruitment. The data is summarized in Table 5.3. One can see that HUST recruited many students whose score was high enough to enter the "top three." In other words, HUST won some of its best students from the "top three."

Table 5.3. The 1994 recruitment of HUST and the "top three" in Hubei Province

	>670	669-660	659-650	649-640	639-630	629-620	619-610	609-600	599-590	Mean
QU*	19	24	29	25	19	24	15	17	7	645
CUST*	3	3	12	11	20	17	13	6	6	635
BU*	3	6	14	10	12	7	16	3	4	625
HUST	1	2	18	25	66	108	156	177	191	615

Source: Data from Yue Chuanlin & Huang Xingguo (1995, pp. 169-170).

* Beijing University, Qinghua University, Chinese University of Science and Technology.

From this case, one can see that this national entrance examination is actually the first step for its elite higher education. The State Education Commission played a crucial role in determining the recruitment number and quotas, the exam rules and selection process. Key universities are privileged in student selection, and they compete with each other for the best students. HUST's strategy is to send recruitment teams nationwide to encourage the best students to choose HUST first, and made a first-choice-first policy. HUST's competition was quite effective. As to who entered HUST, one can see that the students from Hubei Province had a greater chance to enter HUST. Female, minority students and students from rural areas had fewer chances to enter HUST, and therefore, educational opportunity, and lack of equality are an obvious problems in China's higher education. Most recruited students were members of either CCYL or CCP, which indicates a clear linkage between politics and higher education in China.

Now let us look at how HUST treated its new students, a group of selected elite.

Welcome to HUST: From Parent's to the University's Care

Welcoming new students is a big event for HUST because it is the first time that new students enter the university. HUST wants to make a deep impression on them. I see it as a ceremony in which the parents transfer their care of children to HUST.

On July 21, HUST issued a document to "all units" about this activity. The document had three parts: a schedule, work arrangements and duty assignments. The document stated that all new students would arrive at school and compete enrollment from the 4th to 6th of September. To welcome the new students, HUST established a special leading

group. The group, which consisted of heads from all departments and faculties, was headed by a vice president in charge of arrangement.

Second, HUST would establish “HUST welcome spots” at terminals of all kinds of transportation, trains, long-distance buses and passage boats in Wuhan. Each spot would have six people working in shifts twenty-four hours a day during the three days. Furthermore, the university would establish a main welcome site on campus, to be supervised by the arrangement group. Each faculty and department would establish a welcome spot. After new students and their parents arrived at the “welcome spots” in transport terminals, they would be greeted warmly, and the university “welcome buses” would transport them to the campus. All “welcome buses” would enter HUST through the front gate. A huge slogan of “Warmly Welcome New Students!” would be hung on the gate. The university cable voice system would give new students and their parents “welcome words” to make them “feel warm.” All offices relating to enrollment would work at the main welcome site to help new students enroll. The process of enrollment occurred in the following order: confirming recruitment, a health examination, paying tuition, transferring their membership of CCLY or CCP to HUST, and finally registering as a HUST student. Once new students completed this process, the department people would guide them to the assigned dormitory room and help them with whatever was required.

Third, all dining halls of HUST would prepare enough food for students and their parents. The hotels would prepare rooms for the parents. The campus security department would ensure the security of all activities. Support service and student affairs departments were in charge of decorating the campus.

All preparations would be done before September 3. The group in charge would check the preparations. On the night of September 3, all departments would have people on hand to welcome early arrivals. During the three days, all members of the group in charge must ensure that everything went well.

The “welcome slogans” were attached to the document. They were:

Welcome new students warmheartedly!

Study at HUST and become a useful person!

Work harder to achieve greatly!

Practice HUST's motto: “Unity, Realism, Strictness and Initiative”!

Become elite with moral integrity and professional capability to reach the 21st century!

Be ambitious at HUST and be proud as a “HUST-ian”!

Build a prominent university and educate high-quality elite!

Learn knowledge by hard work and create a bright future through wisdom!

(HUST 1995a)

During the welcome period, everything happened exactly as planned. More than 6,000 people poured onto the campus in the three days. Less than half of them were new students, the rest were parents and/or relatives of the new students. According to the university newspaper, a new student was usually accompanied by one or two parents or relatives. The largest accompanying group had nine members. Hundreds of taxis and cars arrived carrying new students and parents. All stores on the campus had stands selling various study/living necessities to new students. Teachers, administrators, students, parents, relatives and friends were running around. The school voice system, vehicles and people made noise everywhere. All this made the campus very festive.

Why did HUST take the “welcome” activity so seriously? A vice dean gave me two reasons. First, entering university, in particular a key university, is regarded as a turning-point in life for most of students. Parents also are proud of their child's achievement. Both students and parents have very high expectations of HUST. Thus, the university must take these expectations seriously and should make a very deep first impression.

Second, HUST is a boarding school. The university had to prepare accommodation for about 2,500 new students. This was a huge endeavor. To parents, HUST was a

new “home” for their child. The university must convince them that their child would be well cared for by the university. For most students, going to HUST was the first time away from home. It was assumed that the university had a full obligation to protect these students from accidents. Any accident had to be reported to the SEC, and the university would be criticized. Thus, HUST had to ensure that everything went well.

One thing that surprised me was that so many people accompanied the new students. This differed from when I came to HUST in 1982. At that time, most students arrived at HUST on their own, with no accompaniment. I asked my visitors, a new student and his father (F). The father was a former classmate of my friend:

Zhao (Z): I did not see any necessity for you to accompany your son here. The university will take care of him.

F: There are some thing you don't know. He has to bring 4,000 yuan cash and luggage with him. It is not safe under today's conditions. I was told that train robbers in Hunan Province in particular target new students because they are most vulnerable and have money with them.

Z: Why should he bring 4,000 yuan in cash?

F: Two thousand yuan for his tuition fee, 1,500 yuan for living expenses this semester and the rest for other things.

Z: You can mail it to the university in advance.

F: What if the money order did not arrive at school in time, or was lost in the mail? Besides, his mother worries about her son so much. He is our only child. Initially she wanted to accompany him here, too. Unfortunately she did not get leave. So she insisted I must do this for her.

I asked the son (S): Did you ask your parents to accompany you to school?

S: No, I didn't. Actually, several classmates and I decided to go together. We could help each other. But my mother did not allow me to do so. To me, it was unnecessary.

Z: Are you sure you can handle everything by yourself?

S: No, I am not. I did not expect the campus to be so large, with so many students and the enrollment so complicated that I don't think I could do well without my father's help.

F: I stood in the line for the health examination while he dealt with the recruitment confirmation. After he took the health examination, I was in the line for paying tuition. Although we two worked together, it took us three hours to go through the whole process.

Z: Do you both feel better now?

F: It is much better now. In fact, his mother was right. This boy definitely needs help. He could not handle everything on his own. By the way, do you mind doing me a favor?

Z: What?

F: His mother and I hope you can take care of our son during his study at school.

Z: I will leave in a few months. You knew this, didn't you?

F: Yes. But you have friends here, right?

What is the significance of this "welcome" activity? I see three points:

- Both HUST and parents defined students as "persons needing care." Thus, the welcoming activity became a ceremony in which parents transferred their supervisory authority over children to HUST. HUST received this duty with a promise: we will train your child to be a "useful person." In the whole process, most students did not act as independent individuals although their average age was 18 (see Table 5.2). Thus HUST would shape them from immature to mature and self-disciplined people prepared for a boarding school life. This is the first course: military training.
- HUST is a key university, thus it encouraged students to become "elite" (*jingying*), which was clearly stated in the university welcome slogans. This is an essential message that HUST wanted to deliver to students and their parents.
- HUST wanted its students to have moral integrity and professional capability, but moral integrity comes first. This feature is a continuing of China's educational tradition, particularly from Confucianism.

Military Training: Preparing for a Boarding School Life

The first course for the 1995 new undergraduates was a four-week intensive military training from September 7th to 30th. Since 1949, China has a tradition of giving students military training. Before 1978, military training was called "learning from army"

(*xuejung*). However, the current military training was restored after 1989 as a consequence of the Tiananmen event. The major purpose was to discipline students for a boarding school life and to give them basic military knowledge (HUST 1995b).

The 1995 cohort of 2,368 undergraduates was organized into one regiment, two battalions, fourteen companies and eighty-two platoons. HUST invited 107 military trainers from a military academy to be trainers. About twenty student administrators of HUST were in charge of running the training. All students, military trainers and administrators dressed in military uniform and lived together during the period of training.

The training had three components: basic military knowledge (22 hr.), drilling (54 hr.), shooting (32 hr.) and fighting (6 hr.). The military training ended with a dress parade. The document about this training stated:

During the training, [the university] strictly applies a military management to all students and all military discipline should be exactly exercised. [Instructors] should pay particular attention in helping students build correct styles of thinking and work in order to develop their ability of self-discipline (HUST 1995b).

This was the primary purpose of the military training. Before they entered HUST, the students studied at school, lived at home, were cared for by parents and had no collective living experience. Now HUST was going to prepare them for a boarding school life which was based on collectivism and self-discipline.

This training was very tough for students, six days a week, from 6:30 a.m. to 10:30 p. m.. They were trained exactly as new soldiers training in a military base. In terms of discipline, the training was very impressive. On the parade day, it was hard to believe that these “soldiers” were the students who just arrived at the university four weeks ago accompanied by parents. There were, however, different opinions on the training. A professor commented:

It is true that students are well disciplined after training. But meanwhile, their dream about our university has died. Now, to many new students, HUST is not just *like* but *it is* a military camp. If students spend their university life with such an impression, it is very bad.... I do not mean it is bad or unnecessary to give students military training. My point is that the university picks an improper time to do it. If we put this training later, we might avoid its negative effects.

The new students' reactions to military training varied. Some were excited about it as they felt they became stronger, more independent and really started a new life. Some considered it wasted time. Most of the more than thirty students I chatted with agreed that this military training changed their work and life style greatly.

Student Management

HUST has a special system in charge of student affairs. I first introduce this system, then its operation, its personnel problem and HUST's solution.

The System

After enrollment, students were divided into "classes" by disciplines. HUST has two kinds of classes: a student class, a group of students studying and living together, and a teaching class, a number of students attending a course.

Usually a student class has about twenty five to thirty students. To obtain a bachelor degree, a student needs to spend four years in university. During this period, students in the same student class work and live together in several adjacent dormitory rooms in the same building. All female students live in two separated buildings, walled and well guarded. No male is allowed to enter without approval. Each room is about sixteen meters square and has four bunk beds. Usually seven students share one room and two students share one bunk bed. This arrangement makes interpersonal relationships very sensitive for all. At their celebration party at graduation, I asked twenty three of the 1995 graduates what they learned most at HUST. The answers varied. But they agreed on

two things: they had learnt how to learn (*zhixue*) and how to deal with interpersonal relationships (*weiren*). The second clearly relates to the collective living style at HUST.

HUST has a specialized system in charge of student management. HUST had 57 seven bachelor degree programs in 1995 and each program typically recruited one student class each year. Some recruited two or three student classes. In a period of four years, a program had four student classes. Some had eight to twelve student classes. If a department had three programs and each program had four student classes, this department would have twelve student classes, about three hundred students. Thus, it needed people to manage these students. People who are in charge of student management had a title: Student Political Ideology Instructor, or simply "Student Instructor." In 1995, HUST had 318 student classes, 9,418 undergraduates and about seventy full-time student instructors. They are the main body of the system.¹¹

The duties of the student instructor were to:

- establish student organizations and organize student activities
- maintain the university discipline and evaluate students' performance
- distribute scholarships, fellowships and stipends
- recommend students for awards
- guide students in following the official ideology
- recruit the Chinese Communist Party members
- help the department in graduate job assignments (Pen Zhihong 1993, p. 13).

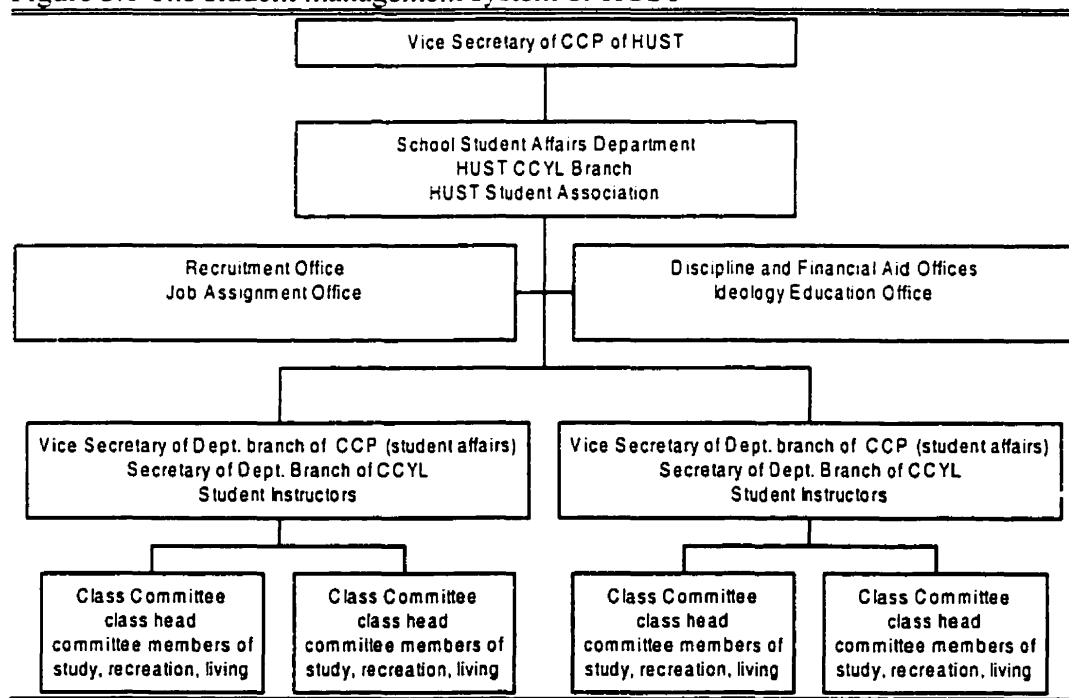
These duties made them managers as well as teachers.

Student instructors managed students through student organizations. Each student class had a class committee. Each committee had four members, a class head and three members in charge of study, recreation and living affairs respectively, and each class had a CCYL branch. Similar student organizations were also established at the department and the university level, called "student association" and "general branch of CCYL."

These student organizations were under the supervision of the student management system.

A department with a large number of students usually had several persons in charge of student management. They had job divisions. For instance, the Department of Electrical Engineering had 1,238 students and had six full-time persons in charge of student management, a vice secretary of the general branch of the CCP as a general manager, and a secretary of the general branch of the CCYL as assistant manager. They supervised the other four student instructors. Each student instructor supervised one of four cohorts (the students who entered HUST in the same year). The Department of Mathematics had only one hundred and one students. It had only one student instructor who supervised all students in the department. This person was in turn supervised by a vice secretary of the general branch of the CCP at the department.

Figure 5.1 The student management system of HUST



Source: Field notes

At the university level, there is a student affairs department. It controls the entire student management system, including all the department student management systems,

student associations, and the CCYL branches. It has four functional offices. This system was supervised by a vice party secretary. The entire system is presented in Figure 5.1.

One can see three features of this system:

- The system is under the supervision of the CCP.
- Student instructors supervise student organizations.
- The student management system is separated from the academic system.

Two Interviews with Student Instructors about Their Job

To know how the people work in the system, I interviewed several student instructors. The following are two interviews. The first interview is about how HUST selects and trains student leaders and recruits Chinese Communist Party members from undergraduates. The second is how a student instructor did his daily work.

Mr. Chen worked at the Student Affairs Department. He told me how HUST selects, trains student leaders and recruits the party members from undergraduates.

Chen (C): Student management has two main tasks. One is to maintain discipline over students. This is fireman's work. It takes time but is not the most important work. The most important is to spread the party ideology among students and recruit the party members from the best students, because China's future largely relies on these young intellectuals. If they join the party when they are young, the party can ensure its leadership over China. Besides, the party membership is important for promotion. If one occupies a position of leadership, it will be easier for him (or her) to make more achievements. Their achievements will in turn contribute to the university's reputation. Thus, HUST pays great attention to recruiting party members among from the best students.

Zhao (Z): Who qualifies as "best students"?

C: There are several criteria. First, their marks in all courses must be over 85 percent. Second, they must have outstanding performance in other academic, collective, or social activities. You know, 80 percent of our students were from key middle schools, and 60 percent were student leaders in their previous education. However, only 20 percent of

them could be student leaders at HUST. And less than 5 percent of them will be recruited by the party. That is, we select only a very few students and give them special training.

The process starts during the first year. The first step is to select class heads. This selection is based on their academic record in middle school and their entrance exam scores. Without good marks, one has difficulty building a reputation among students. Thus students with the highest marks are recommended as class heads. At the end of the first year, those who are still able to keep up good academic standards and are dynamic in organizing and participating in collective activities will be selected.

During the summer vacation, we organize trips for them to visit factories, military posts, and farms in order to let them know more about society. Such activities give the students opportunities to know each other. In this way, a network develops among them. This network is important for us. During these activities, we become familiar with them and encourage them to set even higher standards for themselves.

At the beginning of the second year, those who performed outstandingly in these activities will be recommended to be student leaders at the department and the school levels. They are the backbone of student organizations. They cooperate with the school and organize various activities among students and help to resolve problems which the school has difficulty dealing with. Through all these activities, students learn, develop and practice skills of leadership. During the entire period, the school continually guides them. The best will be encouraged to join the party.

Once they apply to join the party, the university will give them special courses about the party. A few will join the party as "probationary members" (see Chapter 11) in the third year, and most of the remainder join the party in the fourth year. By graduation, they are party members.

Z: After they graduate, how does this system continue?

C: Most of the older generation of student leaders retired from their position during the fourth year. Student leaders of the next generation will replace them. It is a cycle. The general pattern is: they are selected in the first year, are trained and practice in the second and third year, and after the fourth year, they are mature.

The party member recruitment among junior and senior undergraduates from 1991 to 1994 confirmed this pattern (see Table 5.4).

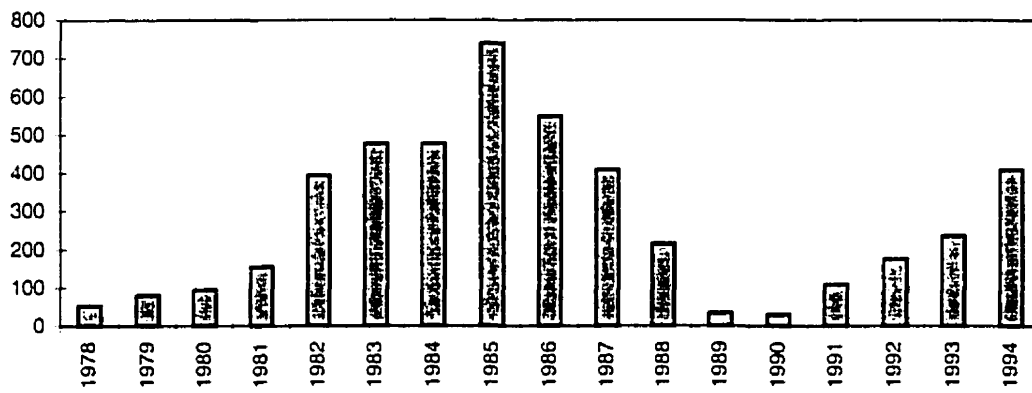
Table. 5.4 The party recruitment pattern among undergraduates, 1991-94

year	1 st & 2 nd *	3 rd & 4 th *	total recruited	total students	% in total
1991	2	107	109	10,876	1
1992	1	175	176	11,139	1.6
1993	3	234	237	10,866	2.2
1994	21	389	410	11,270	3.6

Source: Data from the CCP General Office of HUST.

* 1st, 2nd, 3rd, 4th represent first-, second-, third- and fourth-year students, including adult students.

Figure 5.2 The CCP recruitment among undergraduates, 1978-94



Source: Data from the CCP General Office of HUST

However, the total number recruited changed greatly over the period of 1978-1994. Figure 5.2. presents these numbers, the highest in 1985 and lowest in 1989 and 1990. The increase seemingly resulted from the Chinese Communist Party's decision to prepare a new generation for the reform and the decrease seemingly relates to the student protest during 1986-1989. After 1990, the recruitment was increased again, but was still below five percent of the total undergraduates. Clearly, in general, the party was cautious in its recruitment among undergraduates.

What Mr. Chen described is how HUST trains a small group of selected students to be the future leaders for China. The rest of the students are not involved in this process. How do the student instructors deal with them? This was the subject of my interview with

Mr. Ma. Mr. Ma was a student instructor at a department. He was not involved in the student leader training procedure. He said:

Ma (M): I do my job in a routine way. I go to student dormitories each day, usually in the morning and evening, to check if students are going to class or if anyone is ill and needs my help. Each week, I hold a meeting with class heads to monitor the general situation of students. I visit each student's room once every two weeks. To maintain discipline, I tell students, "You come here for a better future. Do not waste your time!" My strategy is simple: push the advanced, help those behind and encourage the middle. It is fair to say that trouble makers are very few. In the past three years, I don't think I really had one.

Zhao (Z): What do you mean by "trouble maker"?

M: Students who interrupt others or violate regulations on purpose.

Z: How would you deal with him (or her) if you had one?

M: I would tell him (or her) directly: "Be honest. If you want to get into trouble, you will get into it. But it would not be good for you and for me. I just graduated three years ago. I know what kinds of games you play." I would tell him what I am going to do and let him make his choice.

Z: How do you deal with a student who violates regulations but not on purpose?

M: It depends. If the result is serious, I have to report it. The person may be punished. If not, I warn him and let him go.

Clearly, Mr. Ma played a governor role. From my observation, most student instructors were similar to Mr. Ma. What were the effects of their efforts? A study reported the discipline violations at HUST from January of 1992 to July of 1993. A total of 173 cases were reported: 71 fighting, 62 cheating on exams, 20 absent from class, 8 gambling, 5 stealing, and 7 others. Six students were expelled (Pen Zhihong 1993, p. 53)

The Problem of Instability and HUST's Solution

Student management had a serious problem: personnel instability. As the student management system was not a part of the academic system, students did not regard "student instructors" as academics as well as did the student instructors themselves. Stu-

dents treated student instructors as “governors” rather than as “teachers.” Thus the assumed educational function of this system was undermined. Many student instructors preferred to pursue an academic career rather than to be part of non-academic staff. This caused instability. HUST recruited twenty five graduates as student instructors from 1988 to 1991, and by 1993, ten of them had left (Pen Zhihong 1993, p. 13).

To resolve this problem, HUST tried a new measure: asking some graduates to be student instructors for only one year. These new student instructors had to have had experience as student leaders during their undergraduate study. After being a student instructor, they automatically transferred to a postgraduate program to continue their academic career *without passing* the national postgraduate entrance examination. This was an attractive solution for some graduates, because the postgraduate entrance examination is also highly competitive. I asked the opinion of a vice dean about this new measure as his faculty had initiated this experiment. He said:

We consider that this measure has two advantages. First, we do not keep permanent positions for student instructors. By using casuals, we can downsize the faculty. Second and more important, we use these positions as training bases to prepare future leaders for academic staff. From our experience, we observed that some very excellent professors failed to handle a research team just because they lacked basic leadership skills. Simply, they just don't know how to deal with people and how to be a leader. By the time we find they have this problem, it is too late to change them. In contrast, we observed some academic leaders who performed well because they benefited from their past experience as student leaders.

Thus, we decided to pick the most brilliant graduates who had had student leader experience as student instructors. During the period of one year, we checked them regularly, we coached them how to be a leader, not as a student but as a teacher. If they performed well, we transferred them into postgraduate programs. It is very likely some of them will become our future academic leaders if they also do well academically. If not, they can either have another job assignment or enter a post-

graduate program. We only operated the experiment for one year. It is too early to see the consequences. So far it seems that this way works well.

Graduate Job Assignment

Graduate Job assignment was another feature of Chinese higher education system. This section introduces China's graduate job assignment system and its reform first, and then examines its effects in the case of HUST.

Soft Plan and Hard Plan

After four years study at HUST, most students graduate with a bachelor's degree. Conventionally, they are assigned a job, or to be more accurate, they are sent to a place where they are assigned. This practice began in 1951. Before 1951, China had no job assignment system, graduates found jobs by themselves. After 1951, China applied a graduate job assignment policy. All graduates from the regular higher education system were assigned a job by the government. This policy was carried out most of the time. All students received a free higher education and enjoyed a monthly stipend, but after graduation, it was assumed that they would accept an assigned job (CEI 1983).

Two ideas underlie this arrangement. First, ideologically, the university is a place for the public interest; all graduates were assumed to work for the public interest. Second, the higher education system is a part of the socioeconomic system. Universities develop experts according to the government's socioeconomic plans. That is, the graduate job assignment is linked to an ideology of socialism and a planned economic system as well.

However, after 1984, three things changed this situation.

- The 1984 reform aimed to change the planned economic system to a market system. Therefore, a labor market would consequently replace the job assignment system.
- Governments could no longer afford this large and free higher education system. Tuition was an obvious solution to this problem. However, if they paid for their education, students should be free from the government job assignment.

- The job assignment system did not always match job requirements and expertise learned at school (Ji Mingming 1995, p. 96).

Thus, the government decided to end this system. In 1994 the State Education Commission announced that all students who entered university after 1994 would have no job assignment. That is, graduates in 1997 and after will find a job by themselves. But before 1997, universities were allowed to experiment with new measures, the most common of which was called the “university-enterprise contract” system.

The university-enterprise contract system is a hybrid of the old job assignment system and a new labor market system. In practice, the top government agency of each university makes a guideline for graduate job assignment, instead of elaborating a top-down plan. Under this guideline, universities inform enterprises about their graduates. Then universities make job assignment contracts with enterprises who need graduates. Universities send these contracts to their top government agency for approval. Based on these contracts, the government agencies make the final annual graduate job assignment plan. This is the so-called “soft plan.” It is a bottom-up approach, quite different from the old top-down approach.

In case graduates do not accept the assigned job, they can pay an “education compensation fee” and are freed from a job assignment. That is, governments still guarantee graduates a job as long as they accept the assigned job.

Some industries such as defense, agriculture, forestry and enterprises with hard working conditions like oil fields, are in a weaker position to attract graduates. For these industries and enterprises, governments still use the traditional top-down plan. This plan is non-negotiable, and thus it is called the “hard plan.” All universities should fill their hard plan first, and then the soft plan.

Thus, in 1995, HUST had two plans: a “soft” plan and a “hard” plan. The “soft” plan was based on university-enterprise contracts and involved a bottom-up approach. With the soft plan, universities and graduates enjoyed a certain freedom in job assignment. The “hard” plan was a continuation of the traditional top-down plan, but only for a few industries. However, all graduates were still guaranteed a job.

Job Assignment at HUST

On December 14, 1994, HUST issued a document about the 1995 graduate job assignment that contained the following major points:

- From February to April 15, the university would contact enterprises who needed HUST’s graduates. Individual departments and faculties as well as graduates were free to contact them to make job-contract drafts. All drafts were to be submitted to the university job assignment office before April 15. Based upon these contracts, the office would make a university job-assignment plan and submit it to the State Education Commission for final approval. After being approved, the contracts would be in effect.
- All graduates who participated in the state direct job assignment plan (hard plan) would be awarded 5,000 yuan. All departments and faculties were to fill the state direct job assignment plan first before filling contract job assignments.
- Graduates originally recruited from the ten remote provinces (Xinjiang, Qinghai, Ningxia, Gansu, Tibet, Guangxi, Guizhou, Yunnan, Inner Mongolia, Heilongjiang) were to go back to the provinces except those who had been recruited as postgraduates and those who participated in the state direct job assignment plan.
- The graduates who were in the following situations were to pay an education compensation fee to the university:
 - 10,000 yuan for those who planned to study abroad or work for foreign-funded enterprises or who rejected the assigned job.
 - 6,000 yuan for those who planned to work for China-foreign joint-ventures.
 - 3,000 yuan for those who planned to work for enterprises in the special economic zones or collective or private enterprises.

- The graduates would be sent back to the local governments where they were recruited for a job assignment if they failed to find a job in a period of three months after the university job assignment (HUST 1994a).

A vice dean of the School of Mechanical Science and Engineering described how his faculty did this work:

We had many connections with enterprises. At the beginning of this year, we sent them information about our graduates. A few months later, we received feedback from them. The demand was about five times greater than the graduates we had. We showed all of the information to the graduates and let them choose. Then the graduates made a draft contract with us. The work was done.

As to the “hard plan,” mainly for defence and the large-size state-run enterprises, the graduates from the ten remote provinces fitted most of them. We also encouraged the students who were party members to take them. The reason is very simple. These enterprises are the backbone of Chinese industries. If one really wants great achievements in life, these are the best places to go. Besides, this tests to what extent they are qualified to be a party member. If they have no intention of serving the country wholeheartedly, we may suspend their application for the party membership. In fact, our graduates were promoted very quickly in these enterprises because they have academic as well as political strength.

Other faculties and departments had similar procedures for graduate job assignment. In this job assignment, one can see:

- The university was asked to fill the “hard” plan first. That is, the public interest came first. This principle did not change in the new job assignment system.
- Graduates who went to foreign-funded, China-foreign joint-venture, collective or private enterprises paid different education compensation fees. That is, enterprises with non-public components had to pay back a certain amount of money for the benefit of public higher education.

- The government allowed the graduates from the poor provinces to fill the “hard” plan. As a result, such graduates might not return to their home provinces.

Graduate Interregional Migration

It was mentioned in Chapter 3 that the SEC key universities enjoy an advantage in that they can assign their graduates nationwide. This factor attracts many youths to make these universities their first choice. As a result, students recruited from less developed regions tend to find jobs in more developed regions. This causes an interregional migration. In general, the better a university, the greater the migration. This is obviously an important social function of the key universities of the SEC. However, there are no studies of it in the current literature. Here, I investigate this function with HUST’s data of the graduate assignment from 1992 to 1994, focusing on the question of which provinces benefit from this function and which provinces lose their graduates.

The provinces or equivalents were divided into three groups according to their economic development level. The six best developed provinces are in Group One. They are: Beijing, Shanghai, Guangdong (including Hainan Province), Zhejiang, Jiangsu, Fujian. The ten least developed provinces are in Group Three. They are: Xinjiang, Qinghai, Ningxia, Gansu, Tibet, Guangxi, Guizhou, Yunnan, Inner Mongolia, Heilongjiang. The remaining thirteen are in Group Two. Hubei Province was highlighted because it is the home province of HUST. Students were listed by where they were recruited from and where they were assigned after they graduated. Then, we can see how many students a province *sent to* HUST and how many graduates the province *got from* HUST. The results are presented in Table 5.5.

Group One sent 1,112 students to HUST and received 2,512 graduates from HUST; thus the provinces in this group received 1,400 extra graduates. Of the six, Guangdong benefited the most. It sent 313 students to HUST but received 1,042 graduates from HUST. The difference was 729. Beijing and Shanghai also received 477 and

211 extra graduates respectively. The remaining three provinces had a slight loss of 17 graduates.

Table 5.5. HUST graduate job assignment, 1992-94*

	1992 (n=2245)		1993 (n=1952)		1994 (n=2306)		Total (n=6503)		
	sent to	got from	to	from	to	from	to	from	Change
<i>6 in Group 1</i>	379	649	313	960	420	903	1,112	2,512	1,400
Beijing	20	115	15	206	22	213	57	534	477
Shanghai	5	63	7	80	6	86	18	229	211
Guangdong	108	236	87	456	118	350	313	1,042	729
Zhe, Jang, Fu	246	235	204	218	274	254	724	707	-17
<i>13 in Group 2</i>	1,650	1,443	1,462	898	1,673	1,244	4,785	2,512	-1,200
Hubei	689	531	653	361	597	323	1,939	1,215	-724
<i>10 in Group 3</i>	216	153	177	94	213	159	606	406	-200

Source: Data from the original records of job assignment of HUST graduates in the HUST Achieve.

* A few records indicated only the assigned work unit without the location of the work units. Such records were ignored.

Group Two sent a total of 4,785 student to HUST but only received 2,512 graduates from HUST. These provinces lost 1,200 of their graduates. Hubei Province lost most, 724 of its graduates. Among the 1,215 graduates who were assigned to Hubei Province, about 400 were accepted by HUST for postgraduates. That is, only about 800 graduates actually worked for Hubei Province. The return rate was about 58.7 percent. There was a similar situation at Wuhan University, another SEC key university in Hubei. This disappointed Hubei Province so much that it was rumored that the provincial government refused to recommend the two universities to join the 211 project (for details see Endnote 3 in Chapter 3). Finally, after the two universities promised that they would “meet the demands of Hubei Province first in graduate job assignment,” the provincial government changed its attitude (SEC & HPG 1995).

Group Three also lost 200 of their graduates. This was likely caused by the inconsistency of government policies. On the one hand, government asked the graduates from these provinces to return to their home provinces, while on the other hand, government allowed them to fit the “hard” plan.

Clearly, HUST's graduate distribution favors a few of China's most developed regions and does not favor the rest. This contributes to the interregional intellectual imbalance in China.

We have examined several aspects of HUST's student management from student recruitment, to welcoming activity, to military training, to student management, and to graduate job assignment. From the above, we can see two features of HUST's student management, that is, elite education and boarding schooling.

As to the feature of elite education, the first we saw is the national entrance examination. It is a selection measure, which selected a limited number of youths to receive higher education. This makes this examination highly selective and competitive. In the student selection, key universities have priorities in student selection. As a result, most of the best students were selected by key universities. For competing with other key universities for the best students, HUST launched a nationwide promotion of the university among the key middle school as well as the best students, and made a first-choice-first policy to enhance the promotion. By this way, HUST won some of the best students from the best Chinese universities. However, the selection of the best does not stop here. During the study period, HUST selected the best students as student leaders, gave them special training, and recruited the party members from them. After they graduated, HUST sent many of them to the most developed areas of China and to the backbone enterprises of Chinese industries. All of these practices can be regarded as components of elite education, practiced in HUST as well as Chinese higher education system.

The another feature is that HUST is a boarding school, that is, all students lived on the campus during their study at the university. We have seen in Chapter 4 that this campus creates an artificial educational environment for students, which is far from secular society and separated from the outside world. This environment likely creates an

image among the students that they are a special group of people and are here to study for a special mission. This image actually exists and is backed by the expectations of the country, the parents and the university. For most of the students, the life style at HUST is quite different from their previous life style. Before they entered HUST, they studied at school and lived with their parents. Their parents took care of them. However, at HUST, all students live together for four years, seven living in one room and two sharing a bunk bed. This makes HUST a place to learn a collective life style and related collectivist concepts. In fact, collectivism is the major content in HUST's moral education. This is not just because collectivism is a part of CCP's ideology but also because HUST needs it to enhance its boarding-schooling. In this sense, HUST is the first place where students learn a collectivist life style and learn how to deal with interpersonal relationships properly. This collective life style is different from that in a family as it is not based upon blood relationships but upon various "-mate" relationships like roommates, classmates and schoolmates, and therefore this experience prepares students for a more complicated social life after they graduate. The importance of this learning can be seen from the military training because it is specially designed to prepare students for a collectivist boarding school life. The effect of this learning is obvious when graduates commented that one of the two most important things they learned during their study at HUST was *weiren* or dealing with interpersonal relationships properly.

However, it would be incorrect if one assumed that HUST created a completely different life style for its students. In fact, HUST continued many duties that belonged to the students' parents. For instance, it was assumed that HUST would ensure students' social security, care for their health, and supervise their progress of study. All these duties were carried out by students' parents before, and now became the duty of HUST. From the welcoming activity, we saw that HUST took these responsibilities seriously. This makes the welcome a ceremony of transferring care, from the students' parents to HUST. In this sense, it is fair to say that HUST is a new "home" for its students. Thus, what actually happened is a transition in which HUST created a new image and a new collectivist life style for its students, but it carried out some duties which belonged to students' fami-

lies before. This gives us cues in which ways a Chinese university acts differently from Chinese families and also links to the families, also how a Chinese university acts differently from Western universities in its way of dealing with students.

Pulling the two features together, one can see that HUST practiced a boarding-type schooling for its elite students. To carry out this task, HUST established a specialized student affairs administration system, and this system is under the supervision of the Chinese Communist Party at HUST. Although this system is encountering personnel problems, it is unlikely to disappear as long as HUST is still a boarding university.

¹I summarized the authority and the way of recruitment in the two periods in Table 5.6.

Table 5.6 Authority location and the ways of recruitment, 1958-61, 1966-76

Time	Types of schools	Authority location	Ways of selection
1958-1959*	all schools	local government and individual universities	examination mainly with recommendation
1960-1961*	key universities and ministry universities	unified examination by the central government	the same above
	local universities	local government and individual universities	the same above
1966-1970	no recruitment		
1971-1976	some universities	local government and individual universities	recommendation mainly with examination

Source: CEI (1983)

*All ministry universities were transferred to local governments in 1958-1959 and returned in 1960.

² The age requirements differed according to study subjects and types of students. For instance, for foreign languages, candidates should be under the age of 23. For gifted students, the age requirement could be under 15 (Yue Chuanlin & Huang Xingguo 1995, pp. 1-13)

³ China has five categories of candidates: humanities and social sciences, science, foreign language, arts and athletics. This study is about the first two.

⁴ In the 1995 national entrance examination, four provinces adopted a 900-point evaluation system. This system was based on the normal curve distribution of the examination marks of all candidates. Thus, their reported scores indicated the relative position of each candidate in the total population, rather than the paper mark. An example report is: ID 200010662, general score, 608 (86), Chinese, 590 (81), 530 (61), 690 (97), physics, 529 (61), Chemistry, 577 (78). The general score 608 means that the person with ID 200010662 is the one at the 86th percentile, that is, eighty-five percent of candidates scored below this person (ACESP 1995, p. 17).

⁵ Since 1993 (?), SEC allows students from some provinces, e.g., Zhejiang, Shanghai, not to participate in the national entrance examination but in the united local examinations of middle school graduation. The examination covers nine exam subjects: politics, Chinese, mathematics, physics, chemistry, foreign language, history, geography, and biology. The total score is 900.

⁶ Some provinces like Sanxi ask candidates to make their choice after the examination but before the final scores come out.

⁷ Since 1978, China has built a key school system in primary and middle schools. Like the Chinese key universities, these key middle schools usually enjoy the best teachers, equipment and other resources in order to train high-quality students. In 1979, China had 5,200 key middle schools (CEI 1983, p. 508).

⁸ This is an unwritten policy stated only to the visiting students, but in 1995, the policy was announced publicly in Guangdong Province (Guangdong zhaosheng bao [Guangdong newspaper of Recruiting] May 31, 1995, p. 14).

⁹ High schools prepare their students by testing them using the previous examination papers or they make up examinations imitating the previous examinations. Such examinations are called "imitation examinations." Teachers help students in choice-making according to their scores in imitation examinations. HUST advised candidates on choice-making according to these scores, too.

¹⁰ The other 115 students were not counted in. Of them, 100 were recommended students. They were winners of international or national competitions in fields of pure science. Their schools recommended them to HUST. The other 15 were athletes who were winners of international or national games. They participated in the national entrance examination, but their selection was based upon their sports achievement. They enrolled at HUST as preparatory students.

¹¹ HUST had about 2,500 postgraduates in 1995. They were managed by the Graduate Faculty. This faculty usually asks each department to have a professor in charge of students affairs and to ask supervisors of students to take part in managerial duty. All three-year program students are managed by the Adult Education Faculty. This faculty has its own student management system and had 15 student instructors in 1995. So, HUST has three student management systems. This study focuses on the system for four-year undergraduate students.

Quality Control in Teaching

The previous chapter showed that how HUST practiced an elitist schooling in its student administration, and this chapter will illustrate how HUST educated its elite students. In Chapter 3, the Chinese post-1949 higher education development was portrayed as the history of a battle between two winds: a quality wind vs. a quantity wind. After 1977, the quality wind dominated China's higher education. Chapter 2 mentioned that the quantity wind blew awhile in 1992-1993 and then a nationwide downslide of educational quality occurred. Thus, the SEC stopped the quantity wind and turned to quality control in 1994. The first priority of the SEC in 1995 was to resist the educational quality slide. The reader might ask: How does China control its education quality and why? This chapter will address these two questions.

This chapter has two sections. Section 1 addresses three issues — how China practices its education quality control and Section 2 provides five arguments from people who prefer this quality control system. In my view, these people make their arguments from five perspectives: politics, economics, knowledge development, culture and academic ethics. Their arguments reflect their attitudes to higher learning which are different from but share some common ideas with the West.

A Top-Down Control System

What does the Chinese educational quality-control system look like, how does this system use the expert consulting system on quality control and how does this quality control system resolve the contradiction between quality control and innovation? This

section will address these issues. Table 6.1 presents a summary of the Chinese educational quality-control system in the case of HUST.

Table 6.1 China's quality-control system in the case of HUST in 1995

level	control point	The main measures of control
SEC	<i>degree</i>	execute China's unified degree system
	<i>program</i>	make the national unified program catalogue make basic program requirements for each program approve program establishment for each university
	<i>courses*</i>	organize writing textbooks and reference books organize writing reference course outlines organize national unified course examinations
	<i>overall evaluation</i>	organize overall teaching evaluation for all universities.
University	<i>degree</i>	execute China's unified degree system.
	<i>Programs</i>	execute the SEC program catalogue supervise program innovations
	<i>courses*</i>	unify course teaching supervise textbook writing
Department	<i>programs</i>	develop the SEC basic program requirements into program plans organize program innovations
	<i>courses*</i>	supervise textbooks and teaching materials writing
TRG**	<i>courses*</i>	develop department program plan to TRG course guidelines supervise teaching & teaching innovations select teachers to write textbooks and teaching materials
Teacher	<i>courses*</i>	teach according to TRG course guideline write textbooks and other teaching materials teaching innovations

Source: Data from GB (1988), SEC (1995b), HUST (1992).

* common and foundation courses

** initializing Teaching Research Group

To understand Table 6.1, we need to know three points. First, this table is based on the case of HUST, a SEC university. Thus the control system has only five levels. In the cases of provincial and ministry universities, there is a level of local or ministry government between SEC and university. That is, the SEC represents the central government

supervising local and ministry higher education, and local and ministerial bureaus manage their universities under the SEC's guidance. To guide local and ministerial universities, the SEC runs a few universities and asks local and ministerial universities to take them as models. Local and ministry bureaus usually take the SEC supervision of its universities as the model to supervise their universities. In this table, the local/ministry level is not presented.

Second, the information provided in this table is based upon HUST's four-year undergraduate programs in 1995. The adult education and postgraduate programs are absent. But the principles presented in this table are suitable for all kinds of programs.

Third, the term "execute" in the table means "strictly carry out." For instance, that "the SEC executes China's degree system" means that the SEC strictly carries out China's degree system and it has no authority to make any change by itself. "Supervise" means "guide and support." That the university supervises program innovations means that the university guides and supports program innovations. Guidance gives more space for teaching innovations within a given direction.

From Table 6.1, one can see a five-level system from the SEC to individual teachers and it has four control points: degree, program (or specialty, *zhuan ye*) and course, plus the SEC overall teaching evaluation. In terms of control range, the control gradually narrows down from the SEC to individual teachers. The SEC and university control degree, the SEC, university and department control program, and all levels are involved in control of courses. In addition, the SEC solely holds the authority of the overall teaching evaluations for all universities.

Degree. The first control point is degree. China applied a national unified degree system. That is, all individual universities issue unified degree certificates. There is a format for degree certificates. The certificates are book-like. On the left side, there is a national emblem above and a degree title (doctoral, master's or bachelor's) at the bottom. On the

right side is the text. It is fixed, leaving only some spaces for universities to fill, including the awardee's name, gender, birth date, university and department names, study period, major, signatures of the university's president and the chair of university degree committee, the date and a serial number. In other words, this is a *national* rather than *individual university* degree system. The idea underlying this unified degree system is that the *nation*, not individual universities, takes the responsibility for the quality of degrees.

To ensure degree quality, the China's People's Congress passed a bill to establish this degree system in 1980, and a State Council Academic Degree Committee was established in 1981. This committee holds the authority to determine the types of degree, make rules for the degree system and approve applications for degree-awarding authority. It is *illegal* for a university to award degrees without approval from the committee. This is the most important function of this committee in educational quality control.

For instance, HUST had 57 bachelor degree programs, 76 master degree programs and 29 doctoral programs in 1995. It means that all these programs had been approved by the committee and had authority to award a degree. If HUST wants to establish a new degree program, it has to send a report to the committee with the program plan, teachers and teaching facilities, in order to apply for a degree-awarding authority. If the application is disapproved, HUST cannot award a degree to the graduates from this program, and the initiation of this program is *dead*.

In a word, this national degree system is actually the cornerstone of China's quality control system. This committee is under the leadership of the State Council. The SEC and individual universities are in the position to execute the degree system (CEYE 1984, pp. 639-646). In practice, the committee works with the SEC closely, particularly in approving applications for degree-awarding authority.

Program. This is the second control point. The SEC, university and department are involved in program control.

The SEC controls programs through three steps. The first step is to make a unified program catalogue which regulates the program category, sub-category and the name of each program. For instance, the SEC has divided all programs into ten categories. In the engineering category, there is a sub-category for communication engineering. This sub-category has four kinds of programs: communication engineering, wireless communication, multi-channel communication and radio & TV engineering (GB 1988, p. 129). Universities must select from the four if they want to establish a program in the field of communication engineering. It is *illegal* if a university sets a program outside of the four.

The second step is to make program guidelines for each program, or more accurately, *basic* program requirements, which include the goals and objectives of a program, common and foundation courses, reference teaching hours of the courses, basic requirements for teachers, teaching and practicing facilities, and minimal annual enrolment. Here the term *basic* means that universities must meet these requirements but can go beyond that. The basic program requirements set program standards for individual universities. The SEC evaluates teaching of a program against these standards and promotes program innovations by changing these standards (SEC 1987, 1989).

The third step is to approve program establishment. In general, this approval is based upon the program catalogue and program guidelines. But the SEC also uses this step as a planning tool in two ways:

- To balance demand and supply of graduates. For instance, if there is an oversupply of graduates from the multi-channel communication programs, the SEC will not approve new applications for establishing this program although applicants meet the basic program requirements.
- To locate programs. The SEC tends to establish more programs in key and major universities as programs in these universities can be mutually supported. Thus a new program in key universities finds it easy to reach the program standards and needs less investment.

The university is relatively weak on program control. First, the university must execute the SEC regulations on a program. Second, the department is the place to develop the SEC program guidelines into concrete program plans. Thus, the university's role on program control consists of supervision, or guidance and support.

The department has a strong influence on program control. The department is the place to develop SEC program guidance into a program plan as well as the place to carry out program improvement and initiate program innovations. Program quality relies highly upon department efforts. The SEC clearly notes this. Thus, it only makes the basic program requirements and leaves space for departments to come up with program improvement and innovations.

In short, powers of program control are basically located at the SEC and department levels. The SEC's power is in making program catalogues and approving program establishment. The power at the department is to ensure that a program meets the SEC program standards, to improve the program and to initiate program innovations. University plays a supervising role in program control.

Course. This is the third control point. All levels of this control system are involved, particularly on common and foundation courses. Common courses are those required for all students, e.g., foreign language, politics, mathematics and/or computer science. Foundation courses are the stem courses of a program. These two kinds of courses take about 80-85% of the total teaching hours in all programs (HUST 1995d). The remaining time is for specialized courses. Thus control of common and foundation courses are important for all levels.

At the SEC level, the SEC organizes experts to write textbooks, reference materials and course outlines. The course outlines gives teachers a reference about the goals and objectives, teaching hours and teaching suggestions of a course. To ensure that teaching

obtains the goals and objectives of a course, the SEC organizes national unified course exams. The first one, the “College English Test” (CET), was started in 1987. It has six levels. CET-4 is for undergraduates and CET-6 is for master’s students. In 1994, the SEC announced it would establish a national course testing database for all common and foundation courses and would use it to evaluate course teachings of all universities (SEC 1994).

At the university level, the first priority is to ensure that these courses reach the SEC standards and to improve them within the SEC direction. To do so, HUST unifies the teaching in four ways:

- HUST selects some teaching research groups (TRG) to offer courses for all related programs. For instance, the Mechanic Design TRG offers Mechanic Design for all engineering programs.
- HUST particularly invests in teaching equipment like computers to improve teaching quality for these groups.
- HUST selects a teacher from each of these groups to take full responsibility for maintaining and improving the teaching quality of these courses.
- HUST uses its course testing database for course teaching.

The department has less influence on courses. It plays only a supervisory role. In contrast, the TRG has a strong influence on courses as it is the place to develop the SEC course guidelines for course plans, prepares teaching material and supervises teachers in teaching. As the SEC regulates only basic requirements for courses, it gives room for course improvement and innovation. In fact, most course innovations were initiated at this level. Teachers as individuals are in a position to follow the TRG’s plans. Adjustments within the given plan are possible. Such adjustments are very common. But profound changes of the TRG course plan are not likely except these approved by TRG.

In an overview, the power in course control is located mainly at the SEC and TRG levels. The SEC organizes teaching material and makes course guidance. TRG is the

place to develop the SEC course guidance into a course teaching plan. It supervises teachers' teaching and initiates course improvement and innovations. In general, university and departments play a supervisory role. Teachers play only an adjustment role in course control.

The SEC overall teaching evaluation. This is a new measure, begun in 1995. The SEC organizes external experts to evaluate the teaching of all individual universities. This evaluation is global, involving all aspects of teaching. It has two levels: C (pass) and A (excellent). Table 6.2 presents the A-level evaluation framework for engineering universities. As a matter of fact, this is the most powerful tool in teaching quality control. By this evaluation, the SEC is able to ensure that teaching in all individual universities is done according to directives and meets its quality standards. HUST was evaluated and passed the A-level evaluation in 1996.

Table 6.2 The SEC teaching evaluation system for engineering universities

aspects	factors	check points *	weight
Teaching condition	<i>teacher</i>	structure of teacher's academic rank and highest degree	1.8
		ratio of teachers to students	
		teachers conducting research	
		young teachers (aged 35 or lower) who give lectures	1.6
		highest degree of young teachers	
	<i>textbook</i>	ratio of awarded textbooks to all textbooks	1.2
		textbook availability before lecture	
		fund for textbook writing	
	<i>facilities</i>	area of classroom per student (over 3.6 square meter)	1.8
		seats of library per student (over 0.2 seat)	
		sport ground area per student (over 3 s. m)	
		laboratory area per student for stem courses (over 0.1 s. m)	2.0
		on-campus practice facility area per student (over 0.5 s. m.)	
		equipment for experiments and practices	
		students participate in practices outside of university	0.9
	<i>advanced teaching facilities</i>	classrooms equipped with electronic teaching equipment	0.9
		language classrooms equipped with special teaching equipment	0.4
	<i>expenses</i>	computer aid instruction equipment	
		courses using computer aid instruction equipment	
Teaching	<i>program</i>	expense of teaching per student (over 800 yuan/year)	1.4
		value of teaching equipment per student (over 6000 yuan)	2.0
		changing program to fit social requirements	1.8
	<i>course</i>	demands for graduates over supply	
		enrollment per program over 60 students	1.8
		stem courses are well developed	2.5
		teachers for stem courses are qualified	

(continuing)

		support staff for stem course are qualified	2.5
		offered 95% of experiments listed on teaching outlines.	
		over 120 computer hours for each of non-computer students	
	<i>morale</i>	able to offer various selective courses	0.6
		most of teachers take teaching seriously	1.2
		students obey university regulations well	
		over 80% students studying at evening during non-exam period	1.2
		students actively participate in academic activities	
	<i>reform</i>	university leaders check teaching/learning on regular base	1.0
		university has a systematic plan and policies in teaching reform	2.8
	<i>management</i>	teaching projects won provincial awards and were practiced	
		well organized management system at university/departments	1.5
		well developed teaching management documents	2.0
		check teaching on regular base	
		computing teaching management	0.6
		well developed graduate feedback system	0.8
Teaching effects	<i>effects</i>	stem courses have an exam database	3.0
		apply unified examination for non-exam database courses	
		give examinations according to teaching outlines	
		over 80% students pass CET-4 at the second year	
		over 95% students meet the physical requirements first year	1.0
		over 80% students do morning exercises and out-class exercises	
	<i>student research activities</i>	university has research projects for students every term	1.3
		over 30% students participate in research activities	
	<i>productive practices</i>	completed research projects per student (over 0.003)	
		over 50% students participate in practices in enterprises	1.5
		over 80% of engineering students conducted a design project as graduate projects and 15% of them were applicable.	2.5
	<i>student feedback</i>	over 80% stem courses were evaluated as "very good"	1.1
		major practice activities evaluated as "good"	1.5
		majority of students considered they are greatly improved in computing, foreign language and social activities	1.1
3 aspects	14 factors	31 items	47.3

Source: Data from SEC (1995a)

In reviewing the entire system, one can see that the most obvious feature is its top-down control. In this system, the SEC holds the most important powers on degrees, programs, courses, and teaching evaluation, the university is in a position of execution and supervision, the department has a strong influence on program, and the TRG influence is mainly upon courses. Teachers have less power on quality control.

However, it is incorrect if one concludes that Chinese professors have no influence on teaching affairs. Professors are widely used as consulting experts at all levels. This work style brings official authority and academic obligation together. The general pattern is that all official authorities, from the State Council Academic Degree Committee

to TRG, invite professors as experts to consult on various teaching issues. The following are two examples, one about degrees and the other about programs and courses. Both cases show how the government authorities use academics as a consulting force in quality control.

A study on the organization and management of the State Council Academic Degree Committee in 1980-1981, when the committee was established, reported:

According to the degree catalogue, [the committee] established ten discipline consulting groups in the fields of philosophy, economics, law, education, literature, history, science, engineering, agriculture, and medicine. The groups were further divided into 44 sub-discipline consulting groups according to programs of degrees. These groups worked independently. All members of these expert groups were recommended and/or selected by the State Council Academic Degree Committee and by the bureaus of the State Council, higher education institutes, and research institutes. They were excellent experts and qualified to supervise doctoral degree students. They all were appointed by the State Council Academic Degree Committee, a total of 436 members (CEYE 1984, p. 642).

With this organization, one can imagine that academics are deeply involved and have a strong influence on degree issues. HUST also organized its degree committees at the university and department levels.

The SEC also uses expert consultants to help it to provide program catalogues, program guidance and course guidelines. The following example shows how the SEC and the Foreign Economy and Trade Ministry (FETM) use expert consultants to make guidelines for two programs and fifteen courses:

[After 1977], education in economics and trade was greatly developed. Many universities offered programs on foreign economics and international trade. They trained many specialists for China's economy and trade. For the purpose of standardizing these programs and improving educational quality, in 1988 the SEC

asked the FETM and the Foreign Economy and Trade University (FETU) to develop program guidance for “international trade” and “international economy cooperation” programs.

Since then, FETM and SEC organized professors from FETU, Shanghai Foreign Economy and Trade College, Tianjing Foreign Economy and Trade College, Guongzhou Foreign Economy and Trade College, Xiamen University, Sichuan University, Jinan University, Beijing No.2 Foreign Language Institution, Anhui University, Tianjing Financial and Trade College and Beijing Space and Aviation University to conduct investigations in the two fields. Finally fifteen foundation courses were set up for the two programs. After collecting suggestions, the professors and experts from the FETU and the Shanghai College of Foreign Economy and Trade worked intensively for two years and drafted a course outline for each of the fifteen courses. In December of 1990, the FETM and SEC invited more than 80 experts and professors from Beijing University, China’s People University, China’s University of Politics and Law, Qinghua University, FETU, Shanghai Foreign Economy and Trade College, Tianjing Foreign Economy and Trade College, Guongzhou Foreign Economy and Trade College, Xiamen University, Sichuan University, Northeast University of Financial and Economy, Jinan University, Beijing No.2 Foreign Language Institution, Anhui University, Tianjing Financial and Trade, and International Cooperation Institute of FETM to scrutinize and refine the drafts. The final drafts came out in March, 1991.

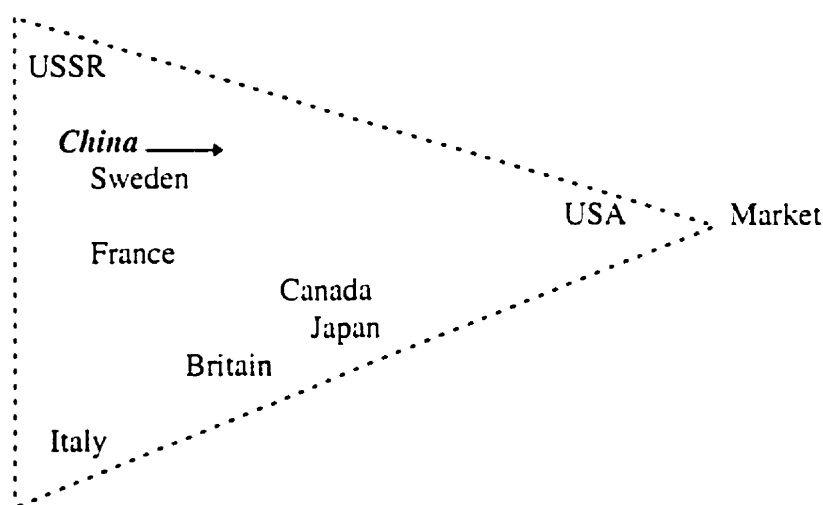
Publishing of these course outlines was an important event for the disciplines of economics and trade. The outlines would be helpful for further textbook writing, guiding teaching activities, and improving teaching quality. In addition, they laid a solid foundation for the program and course evaluations. These program guidance and course outlines are relatively systematic and complete, good as standard teaching documents. The FETM will now organize textbook writings, check teaching quality, and conduct program/course evaluations. This will be based

upon these program guidelines and course outlines. In order to improve teaching quality, all universities under the FETM should carry out only these program guidelines and course outlines (FETM, 1991).

The two cases above show that the government authorities cooperate closely with academics on educational quality control. However, it should be noted that in both cases the academic power is in an assisting position. The final control is in the government's hands. Thus, in Clark's coordination triangle, China's position could be as illustrated in Figure 6.1.

Figure 6.1 Coordination triangle

State authority



Academic oligarchy

Source: Adopted from Clark (1983, p.143). China is added.

A remaining issue is how this system deals with the contradiction between control and innovation. There are three kinds of innovation: innovation as an isolated event involving only one teacher's efforts, innovation as an isolated event which involves the effort of a group of teachers, innovation as a process of diffusion across departments and/or universities.

If an innovation is an isolated event and only one teacher is involved, this kind of innovation is a course innovation at the teacher level. As mentioned earlier, most such innovations are adjustments rather than fundamental and happen everywhere at the bottom of the system. In practice, TRG usually supports such innovations as long as they go along with the TRG direction.

If an innovation is an isolated event involving a group of teachers, such an innovation can be either a course restructuring innovation at the TGR level, or a program restructuring innovation at the department level. Such innovations are also possible as long as they get support from TRG and the department. But the university's attitude is crucial for the success of such innovations. If a university practices its control negatively, such innovations are unlikely or impossible. On the contrary, if a university is positive toward such innovations, they will be booming in the university. HUST is a case of the latter. During the past two decades (1977-1997), HUST constantly supported such innovations. Thus, many programs and courses were either restructured or greatly improved. In many cases, the university had to resist the pressure from the SEC. Many departments, though, were critical that HUST took the SEC guidance too seriously. Such situation became so common that the SEC changed its control from making program plans to making basic program requirements in 1985. This change gave room to departments and TRGs to improve their programs and courses. But the SEC standards still have a strong impact on such innovations. Brand-new program and course innovations are rare. In fact, the SEC control on program and courses is the major source of conflicts with the low levels.

If an innovation involves a process of diffusion which is either across departments or across universities, the SEC or universities tend to select some of the best courses or programs and infuse them with their authority. We have seen two examples of this. One is that the SEC and FETM made new course plans for all international trade and international economic cooperation programs. The other is that HUST unified its course teaching. In general, key universities have more opportunities to initiate and/or involve diffusive innovations than the ordinary universities.

All in all, the top-down control is an obvious feature of this system although many innovations do happen at the bottom of the system. With this picture, the reader may ask why China needs such a top-down control system. The next section will address this question with opinions from people who prefer this top-down control system.

Why China Needs This System? Five Arguments

Academic freedom is considered as a fundamental value for higher education in the Western system and no doubt many of China's scholars also share this idea. But why does China build a top-down control system and why does it seem to work in China? Due to the importance of this issue, in the past years, particularly in my fieldwork, I constantly looked for answers from many academics and administrators, particularly from those who support this top-down system. From their opinions, five arguments were distinguished, which reveal some important features of Chinese scholarship and China's higher education.

However these points should be noted:

- Most of these people were or are senior administrators or senior academics, but they represented an important source of power. Without their support, this system is in my view impossible.
- Among these people, there is a wide continuum of opinions, from strong support to reluctant agreement. The only common element is that they all support this system. Thus this summary represents the points of their arguments.
- This is my summary. It may not present their opinions exactly but I have tried to make them as close as possible.

Most of arguments for this top-down control system were made from five perspectives: politics, economics, knowledge development, culture and academic integrity.

The most mentioned view is from a political perspective. That is, China is a socialist country and higher education in China is for educating socialistic successors. This viewpoint defines the CCP-established mission for higher education. It lays a foundation for this top-down control system. In order to guarantee this political direction in higher education, the CCP government needs to control the higher education system, particularly the educational activities related to political ideology.

The second most mentioned argument is from an economic perspective. A popular saying from this perspective is: China is a poor country but runs a large higher education system ("*jongguo ban da jiaoyu*"). Thus an obvious issue is how to use the limited resources effectively. China's way is organizing the best experts in advising the government on education. Then the government uses its authority to carry out its policies in China. This is an efficient way to utilize China's limited educational resources. Professor Yi's opinion is an example of this.

Yi is a professor in electronics and had visited the United States. HUST made a rule that all common and foundation courses must adopt the national unified textbooks or national awarded textbooks. I asked his opinion about the rule:

Zhao (Z): What do you think about this rule?

Yi (Y): I think it is reasonable.

Z: Why?

Y: Generally, the unified textbooks are better than others. These authors are selected and the drafts are criticized by other experts, not only from academic but also from teaching perspectives. The authors have to revise the draft again and again until the critics are satisfied. It is a restrictive task. This procedure ensures that the quality of these textbooks is in general better than most others. I do not mean that all unified textbooks are the best. As a matter of fact, some non-unified textbooks are also very good. However in many cases, the truth is that some teachers want to increase their academic credits for promotion. They gather together to produce a textbook. They share the writing, publish it with their re-

search funds. I know that some such books were sent directly from printing house to paper factory for recycling. In such cases, the authors made credits, the publisher made a profit, but the society got garbage. What the authors and publishers did was exactly to change paper from white to black. A complete waste of resources! The worst thing is that some of the authors assigned their book as the course textbook and asked students to buy it. It is really bad. Thus, I think this rule is reasonable. It can at least protect students from “garbage books.”

Z: But, if a teacher has no authority in choosing teaching materials for his (or her) course, how could he (or she) deliver his (or her) ideas well?

Y: It is not necessarily true. I have no idea about social sciences. You may know that the progress in electronics field is very fast. New things appear everyday. However, you may also notice that the fundamental principles are still the same, not much change. Thus, we should stick to these principles. This is why I consider that a good teacher is one who is able to clearly deliver the principles to the students and add some materials about progress.

Z: You mean an advantage of unified textbooks is that they express the principles well.

Y: This is a criterion in textbook evaluation.

Z: What do you think about the teaching style in American universities?

Y: I am not qualified to talk about that as I stayed in the US for only half a year. But one thing I noticed is that they have very good facilities to support teaching, e.g., computers, copy machines and very good libraries. Students have access to various sources for their assignments. Thus, although a professor might want students to stick to an assigned textbook, the students may not like to do so. That is not the case in China. We do not have such good resources. We cannot even afford in-class handouts. Thus, we have to rely heavily on textbooks. This makes textbooks crucial for teaching quality.

Z: What are the main disadvantages of the unified textbooks in your view?

Y: Perhaps, “textbook-oriented stuffing teaching.”

Z: Why?

Y: You see, teachers and students know clearly that the teacher’s duty is to transmit the textbook contents to students, and the students’ task is to memorize these contents. No

choice! This makes teaching a one-way process. In addition, some textbooks are very good, crystal clear and no problems left for challenges. Just imagine, even teachers cannot challenge these books, so how could students? So, as time goes by, teachers and students get used to this style. Many of them lose their ability to criticize what they read and gradually lose their creativity.

Z: Is it possible?

Y: It is a possibility! I have noted it for years. I would say that heavily relying on textbooks is a major reason for “stuffing teaching [stuffing knowledge into the students].”

But I have to say that I am not an expert on this.

Z: If you were able to make a choice between the American way and Chinese way, which one would you prefer?

Y: Perhaps the American way.

Z: Why? They also have some low quality textbooks.

Y: I do not mean “garbage books.” My point is that their system can support students accessing many resources which open people’s mind. China’s problem is that students have no such resources such as internet.

Z: So, your opinion is that under the present conditions, the unified textbooks are a better solution even though they cause some problems as “stuffing-teaching,” is that it?

Y: Yes. They are better than “garbage books” which mislead and waste resources.

Clearly Professor Yi made his argument from an economic concern. Note that Professor Yi considered that a top-down control system on teaching is *not good but necessary* in the current situation.

The third argument for the present system is from a perspective of knowledge development. I called it “learning effectively from the advanced countries,” simplified as follows;

There are two ways of knowledge development: creation and learning. The cost of learning is lower than the cost of creation. The dominant way in academically ad-

vanced countries is creation. These countries have to adopt this high-cost way because they are at the leading edge. In contrast, the dominant way in the less academically advanced countries is learning from the advanced because the learning cost is lower. Thus learning from the advanced is the best strategy for the less advanced countries like China.

As China adopts learning as its basic strategy, the essential issue is how to organize a system which can learn and diffuse effectively. This makes a centralized control system necessary. In such a system, a few selected people learn directly from the advanced and the others learn from them. As this work is national, the SEC is in the best position to organize this process. This makes top-down quality control possible.

This argument is related to but different from the economic perspective. The essence of this argument is from three hypotheses: two ways of knowledge development, cost differences between learning and creation and effectiveness of a top-down control system. These three hypotheses give reasons why the developing countries tend to adopt learning rather than creation as the dominant knowledge development strategy and link this argument to the economic perspective.

It should be noted that this argument is far from political ideology because it is essentially drawn from knowledge development in the globalized world system as well as economics of knowledge progress. People agreeing with this view may not necessarily share the political perspective.

The fourth argument is from a cultural perspective. That is, academic freedom and academic autonomy are the Western academic heritage, which originated from *opposition* (*didui*) among university, state and church in the Middle Ages. In contrast, *cooperation* between university and state is China's heritage. Thus academic freedom and academic autonomy are not necessarily suitable for China. Both Chinese governments and Chinese

academics need to learn how to cooperate well to make the country benefit from their co-operation. But the cooperation is *different* from opposition, the sense implied by the terms “academic freedom” and “academic autonomy.”

This to me is the most interesting argument in the five arguments. It is drawn from academic cultural differences between China and the West and denies academic freedom and autonomy as universal principles. Thus, it criticizes the terms of “academic freedom” and “academic autonomy” delivering a sense of *opposition*. Imaginably, people with this viewpoint may not share the political argument.

The fifth is from academic integrity. That is, the current academic ethics situation in China is not conducive to the practice of academic autonomy and academic freedom. Thus, a top-down control is necessary. An inference from this perspective might be that academic freedom and academic autonomy need an academic integrity and self discipline. If an academic community lacks such integrity, it is unrealistic to expect the community to perform academic autonomy and academic freedom well. This argument actually considers academic freedom and academic autonomy as universal principles for academic business, thus this argument turns its focus to academic integrity.

This is reasonable. As mentioned in Chapter 2, the nationwide downslide of educational quality appeared in 1992. It was so serious that the SEC had to make resisting this downslide its first priority in 1995. The “garbage books” problem mentioned by Prof. Yi is another example relating to academic integrity. It should be noted that the essence of this argument is academic ethics. Thus, the financial difficulty of China’s higher education is not relevant to this argument.

These five perspectives covered most of the opinions held by people who supported China’s top-down control system. However, their attitudes toward academic freedom and academic autonomy were very different, even totally opposed. The only common element of the five arguments is the support of this system. Just because of this

common element, China's top-down control system exists and will likely continue into the future.

It appears that China's top-down quality control system and the five pro-arguments provide a case that shows how China, a communist state with Confucian tradition, and the largest developing country in the world, deals with its academic affairs today, and why. In my view, China's case and the five arguments raise two questions:

- Should academic freedom and academic autonomy be regarded as universal principles for academic life in any country and at all times?
- If not, what could be reasonable approaches to evaluate the academic situation in different countries at different periods?

One may need to take all these factors into account when dealing with China's academic affairs. It would be weak if one makes arguments for academic freedom and autonomy only from a perspective of epistemology, and weak, too, if one makes arguments against academic freedom and autonomy only from a political perspective (Brubacher 1982)

We have examined China's educational quality-control system in the case of HUST. This system has five levels: the SEC, university, department, TRG, and teaching staff. This system has four control points: degree, program and course, plus the SEC overall evaluation of Teaching. Regarding degrees, China applies a national degree system. The State Council Academic Degree Committee controls the degree. The SEC and university are in the executive position. The SEC and department have the most influence on program. The university is in a supervisory position. The SEC and TRG have the strongest influence on courses. The other levels are in a support position. In general, the SEC is the most powerful level in the system. This gives the system a feature of top-down control.

China widely uses a consultant expert system on teaching issues, which builds co-operation between the official authority and academic power. But the academics are in a subsidiary position, and the official authority holds the final control.

Although China's system is a top-down control system, innovations are common at the bottom. Teachers conduct adjustment innovations on courses. TRGs and departments conduct restructuring innovations on courses and programs. The university and the SEC conduct diffusive innovations. Key universities have more opportunities to conduct program and course innovations.

In final, I summarized the viewpoints from people who support this top-down control system from five perspectives: politics, economics, knowledge progress, culture and academic ethics. It appears that China's top-down control system and the five arguments provide a case of how China, a communist, developing and Asian country, deals with its teaching affairs, and why. This will enrich our understanding of how academic affairs are practiced in different environments.

The Academic Echelon

The theme of this chapter is research management at HUST. In Chapter 3, it was mentioned that after 1977, research became a main focus of HUST. However, unlike teaching management, there was no top-down control over research. Government, the university, the department, even TRG are all in a position of guidance and support. The dynamic of research is from the bottom, i.e., individual academics and research teams. Thus this chapter focuses on them: in particular on “the academic echelon (*xueshu ti-duit*).”

An echelon is a kind of research team. It has three features:

- It is a multilevel hierarchical organization, usually consisting of four levels. One or two academic heads are at the top level, called “academic leaders,” two or three researchers are at the second level, called “major assistants,” several researchers are at the third level as “ordinary researchers,” and many postgraduates work at the bottom as research assistants. All these people work together as a team and conduct research projects in several related directions in their field. The name “echelon” indicates its pyramidal form.
 - Echelon is a conventional organizational form. Conventional refers to an echelon that is not organized by official regulations or contracts. It inherits this form from the Chinese Communist Party military tradition. As a matter of fact, echelon (*tidui*) is a military term, meaning a division organizing its troops into several action groups according to the order of actions. The term was not used by non-military organizations before the Cultural Revolution. During the Cultural Revolution, non-military organi-
-

zations were encouraged to learn from the People's Liberation Army. Since then it has become popular for research teams to be organized as multilevel teams and called the "academic echelon." An echelon may be built upon a formal organization, e.g., Teacher Research Group (TRG), but a TRG may not be an echelon. In fact, in most cases, academics in a TRG do not work as echelons. HUST had hundreds of TRGs but no more than thirty echelons in 1995. Even the university cannot force academics to organize echelons. That is, the cement that holds researchers together as an echelon is not made of official rules or contracts but something else.

- Researchers in an echelon expect long-term cooperation. At HUST, some echelons had existed for over twenty years in 1995. This makes it different from contract-based research teams. The life span of a contract-based team is as long as its contract. Once the contract is completed, the team disappears.

The echelon is important because it has been proved to be one of the most effective research team forms, particularly for engineering projects, which need teamwork. However, the echelon has been encountering a strong challenge from China's market economic reform. Thus, three interesting questions about echelon are: What are the preconditions for the existence of an echelon, why does the echelon work effectively, why does the reform challenge the echelon? In this chapter, I will address these questions with a case of the echelon of the Institute of Mechanic Automation (IMA), considered as one of the best echelons at HUST.

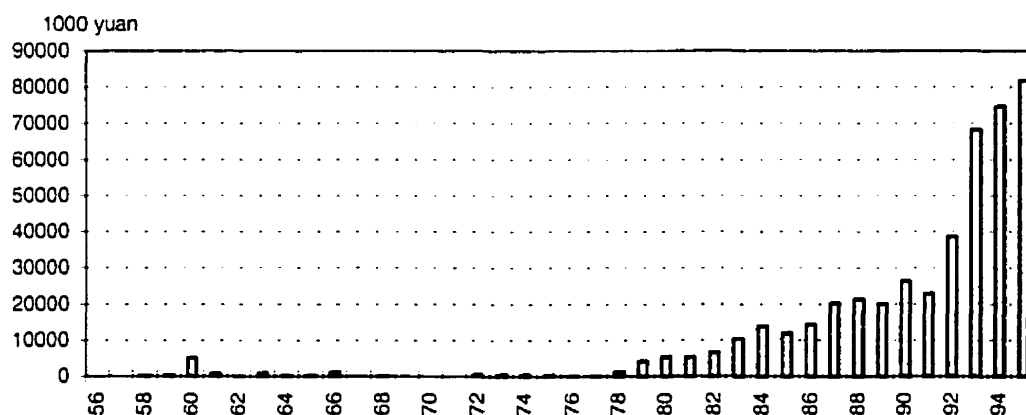
This chapter has three sections. Section 1 introduces the relationship between China's research environment and echelon. I first introduce the increasing academic and financial importance of research for HUST. Then I introduce the rules of funding research and the rules for awarding research, as these regulations create a dilemma for echelons. Section 2 is a story of the IMA echelon. After a brief introduction of the IMA echelon is an interview with two heads of IMA about echelon management, focusing on how IMA deals with the environmental dilemma. Section 3 probes the IMA interior social structure, team values, leadership transition and the party secretary's role in echelon management.

Environmental Dilemma for Academic Echelons

Research: A New Priority

Before 1978, research was not a priority in Chinese universities.¹ The major task of universities was teaching. Universities carried out some research but most of it was teaching related. After 1978, two factors changed the situation. First, after the Cultural Revolution, Chinese government needed more researchers to aid its modernization. Universities were considered a major source. Second, since the 1980s, Chinese higher education had undergone serious financial difficulty. Universities could not get sufficient money from government, they had to create their own financial sources. One of the resources was the research fund. Figure 7.1 presents HUST's research fund from 1956 to 1995.

Figure 7.1 Research fund of HUST, 1956-95*

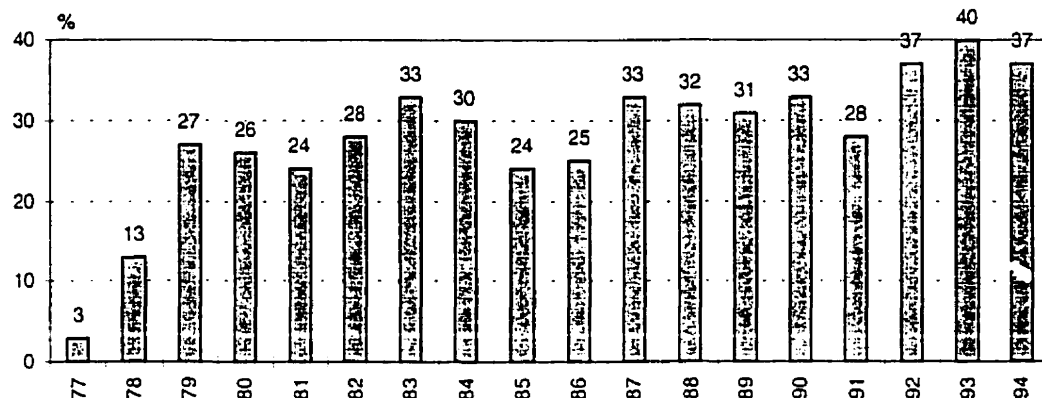


Source: Data from the CCP General Office of HUST and the HUST Research Department.

* at current market price for that year. The exchange rate of yuan to US\$ was 8.32:1 on Oct. 6, 1995.²

Clearly, before 1978 HUST had a minuscule research fund. During these years, teaching was the first priority. After 1978, research became a major focus of HUST. The research fund has grown rapidly from 150,000 yuan in 1977 to 82,000,000 yuan in 1995. Figure 7.2 illustrates the financial importance of the research fund for HUST's operation and the change in university priority after 1977. Clearly from 1982 to 1994, the research fund has stabilized around thirty two percent to thirty six percent of HUST's revenue.

Figure 7.2 Percentage of research fund in HUST's revenue, 1977-94*



Source: Data from the CCP General Office of HUST.

* calculated at the current price for that year, excluding the capital investment from the SEC.

Funding Research

The funding for teaching comes from the top government bureau (the SEC in the case of HUST). Funding for research, on the other hand, comes from many sources. Research funding sources can be categorized into two: vertical and lateral. Vertical funds are those from government bodies, lateral funds are those from enterprises. For instance, in 1993 HUST received vertical funds from forty five government bodies, involving more than twenty ministries. Lateral funds were received from hundreds of enterprises (Dong Ruixiang 1994, p. 4)

The two kinds of funds have significant differences. Government funds support projects which are important to the development of the nation and individual industries. Governments make their funding plan based on Five-Year plans and annual plans.

Vertical projects have three categories: important key (*zhongda*), key (*zhongdian*) and ordinary (*yiban*) projects. Funding strength (FS, amount of fund by project) varies over these levels from tens of thousands of yuan to millions. For each Five-Year plan, government bodies (e.g., China's Committee of Science and Technology) and industry ministries make their guidelines for their important key and key projects and announce the guidelines publicly. As a principle, any organization and individual can submit research proposals to bid on the projects. As the important key and key projects are impor-

tant to the nation or individual industries, the carriers of these projects will benefit from three aspects: improving their academic quality, receiving a large amount of research funding and winning a high reputation.

In contrast, lateral projects usually do not offer such advantages. Most Chinese enterprises are less advanced in technology, with no specialized research and development (R & D) section. Thus enterprises use their project carriers as an R & D force to solve their technical problems. As the research problems are less advanced, funding strength is low. If some enterprises need to conduct advanced-technique and high-cost projects, they usually submit such projects to their top government agency. And these projects will become government-sponsored projects and be listed as important key or key projects. Thus few enterprises conduct advanced-technique and high-cost projects by themselves.³ In addition, enterprises prefer to contract their projects out on a turnkey (which means ready-for-use) basis. So, the carriers of lateral projects have to run between university and enterprise, deal with the enterprise's people and work on business issues. This costs a lot of time and energy. Thus, the economic benefit of lateral projects is considerably lower than vertical projects. In short, universities benefit less from most lateral projects in terms of academic quality improvement, research funding and academic reputation. As a consequence, researchers are more interested in bidding on the important key and key projects funded by governments.

Government bodies use their expert consulting system extensively. They invite experts in relevant fields and organize them as consulting committees. The committees advise governments on project determination, making project guidelines and selecting project carriers. Thus the members of these committees know the information early, usually two or three years earlier. This gives them time to prepare themselves for project bidding. They also have a strong influence on determining projects and selecting carriers. So joining these expert committees is crucial for successful bidding. It is particularly true for an echelon if it wants to win the bidding for important key or key projects. The following

is a story I was told of how the IMA echelon sent its representative to the 863 Expert Group⁴ of CIMS (computer intelligent manufacturing system):

The IMA has a high reputation in the machining automation field as it has been working in this field for over twenty years and has undertaken many key projects. So, the IMA was invited to send a member to join the 863 expert group of CIMS when the group was first organized. However, the professor who was chosen to represent the IMA on the committee did not attend the first meeting of the committee. Since then, the IMA was cut out of the group. This greatly weakened the IMA's power in bidding on important key projects. So, the IMA decided to fight back. The IMA sent a research team to an experimental factory which was selected by the committee as a base for the development of CIMS technology in enterprises. This team, twelve members at most and five at least, was led by Dr. Li, a professor who had earned his Ph.D degree in the US. They worked at the factory for more than a year without pay. This team did such a great job that Dr. Li was appointed as the chief design engineer for CIMS by the factory. Finally Dr. Li was invited to join the 863 CIMS expert group.

Another important factor is the criteria in selection of project carriers. Most expert consulting committees use a point system to evaluate bidders. This system has several criteria and each criterion is given some points. In evaluation, the consulting committee members give points to each bidder. The one with the highest points usually wins the bid. This point system has three criteria:

- The number of the researchers who will be involved with the project.
- The previous achievements of these researchers.
- The academic strength in other related fields of the bidders' unit. Unit here may refer to the department, the faculty, or the entire university of a bidder.

These criteria give team bidders more chances to win the important key and key engineering projects than individual bidders because:

- such projects need teamwork,
- the more researchers involved, the more academic achievement, e.g., projects and articles, can be reported,
- in evaluating the academic strength of each bidder's unit, it is assumed that a project carrier can easily get help within its unit. Cross-unit cooperation is considered to be a problem.

As a matter of fact, such projects were rarely given to individual bidders.

Awarding for the Best Researches

In awarding research, the Chinese government in the 1980s established a hierarchic awarding system for pure science, applied science, R & D, and technology diffusion. This system has three levels: national, ministerial/provincial and local. Each level splits into three or four sub-levels. The awards are issued once a year. In general, national awards enjoy the highest reputation, and local awards the lowest. This award system affects university research in three ways:

- The awards become a factor in university evaluations.
- Universities use the awards to evaluate professors' performance which relates to academic promotion.
- The awards in turn become a factor in project bidding.

Table 7.1 HUST received research awards, 1980-95

Year	national	min/prov*	others	total	Year	national	min/prov*	others	total
1980	3	19	0	22	1988	4	49	11	64
81	2	6	0	8	89	1	38	14	53
82	1	34	4	39	90	5	28	10	43
83	0	11	0	11	91	3	75	10	88
84	0	31	15	46	92	9	81	25	115
85	9	26	1	36	93	6	52	3	61
86	1	51	19	71	94	0	46	8	54
87	7	36	3	46	95	7	45	7	59
					<i>total</i>	<i>58</i>	<i>628</i>	<i>130</i>	

Source: Data from the HUST Research Department.

* awards at ministry/province level.

Thus, the number of awards are carefully recorded by universities. The awards HUST received from 1980 to 1995 are summarized in Table 7.2. The national and ministry/province awards are clearly associated with key and important key projects. An officer of the Department of Research Administration of HUST told me that in most cases, key and important key projects are very likely to win the national and ministry/ province awards, and ordinary projects are less likely.

However, there is a stipulation about the awardees. The maximum number of awardees for each of the national and ministry/province awards is five. This causes a problem for teamwork projects. Who should be in the five awardees if a team has more than five members? In other words, the external team members are not recognized even though they made a contribution to the project. Obviously there is a contradiction between the selection criterion and the stipulation. The former asks for teamwork, and the latter discourage teamwork. As an award relates to academic promotion, the team members without the award may halt their contributions to the team, or simply leave. If this problem cannot be fixed effectively, the team will eventually be destroyed. In academic echelons at HUST, there were several cases in which echelons were killed by this stipulation.

HUST has a research award system, too. It has two parts. First, HUST awards excellent research. As university awards do not enjoy as high a reputation as the national and ministry/province awards, the university awards cannot endanger echelons. Second, HUST allows researchers to take ten to twelve percent of their research funds as a bonus. The purpose of this policy is to encourage researchers to bring HUST more research funds. However, this policy becomes another destroyer of echelons as this policy makes the research bonus a major component of personal income.

For instance, the IMA echelon had a research fund of 1.55 million yuan in 1995. The bonus for this echelon would be about 186,000 yuan (calculated at the rate of twelve percent). After taking off 50,000 yuan to pay graduates who joined the research,⁵ the av-

average bonus for the team members would have been 7,500 yuan (this team had eighteen members). This amount of bonus was in excess of the annual salary for most of the members of the team (see Table 8.13).

As the research bonus is financially important for everyone, the distribution of the research bonus becomes a sensitive issue: how to make team members feel fairly treated in bonus distribution. A key project may not win a high-level award but it surely brings the team a considerable bonus. So research bonus distribution could endanger the team.

To avoid troubles in award nomination and bonus distribution, many researchers prefer to conduct research individually or cooperate only with family members, e.g., husband and wife or very close friends. A professor commented:

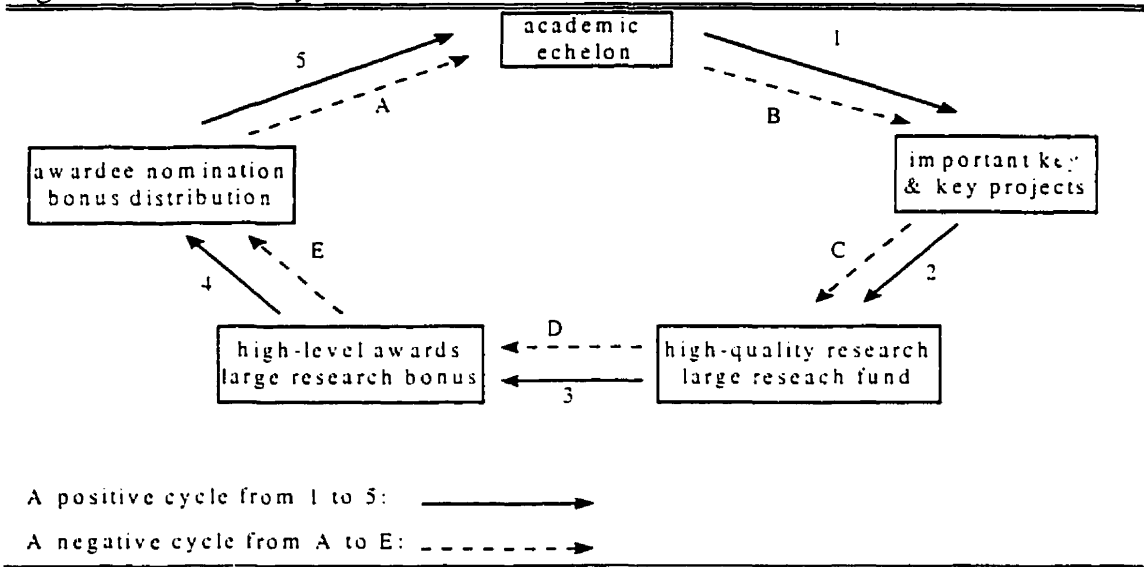
I prefer to conduct research by myself. Whether the result wins an award or not, the bonus is more or less, all mine. I may live on this campus for the rest of my life. I do not want any trouble which may ruin my life forever.

However, as mentioned above, individual researchers are not favored in bidding for important key and key projects. Without these projects, HUST and academics could suffer academically as well as financially. This is the dilemma for echelons. One can see two influence cycles, positive and negative, between environmental factors and echelons, which are presented in Figure 7.2.

For bidding on key and important key projects, the best strategy is to organize an echelon. Important key and key projects will bring the echelon high quality research and large research funds. The high quality research and large research funds give the echelon high-level awards and high research bonuses. And the high-level awards and large research bonuses make the awards and bonuses very sensitive. If the echelon deals with these two sensitive issues well, that is, if most team members are satisfied with the two issues, the echelon will enter a positive cycle. More and more projects, funds and awards will come to the echelon. If the echelon cannot satisfy its members, after its first few vic-

tories, the echelon members will stop making their contributions, or leave. This eventually will destroy the echelon. This is the negative cycle.

Figure 7.3 Influence cycles of environmental factors on academic echelon



In short, two sensitive issues in echelon management are awardee nominations and bonus distribution. They can propel an echelon into either a good cycle or a bad cycle, and thus give the echelon two possible futures. This dilemma makes the leadership of the echelon extremely important. Thus two interesting questions are:

- How do the leaders of a successful echelon deal with the two sensitive issues?
- What is the nature of their leadership?

Now let us seek the answers through the example of the IMA, one of the best echelons at HUST.

Managing an Echelon: An Interview with the Heads

The Institute of Manufacturing Automation (the IMA) was established in 1986. It is a subordinate unit of the School of Mechanical Science and Engineering (SMSE). The predecessor of the SMSE was the Department of Mechanical Engineering (DME), one of the earliest departments of HUST. Some teachers in the department have worked in the field of manufacturing automation since the 1960s.

But in the early 1980s, the department faced a tough situation. On the one hand, the department received only a few key projects. Its rank of research funds at HUST slid from first to sixth and seventh. On the other hand, the scholars returning from abroad wanted to open new fields, e.g., CAD (computer-aided design), CAM (computer-aided manufacturing), CIMS (computer intelligent manufacturing system), and FMS (flexible manufacturing system), but the existing organization system restricted their ambitions. Thus, the department authority decided to restructure the department. Teachers were free to organize the new institutes according to their own academic interests and personal friendships. As a result, people chose to work with people they knew. In 1986, seven new institutes were established. One of them was the IMA. This reorganization saved the department. The department quickly regained its first place (DME 1994). In 1995, research funds received by the SMSE were 21,362,000 yuan, about twenty six percent of the total research funds received by HUST.⁶ In 1994, the department changed its name to the SMSE.

The IMA echelon was built on a formal organization. All members in the IMA were counted as its members. The IMA echelon had twenty-two members and forty-nine postgraduates. But four of its members were studying abroad in 1995. The information about the remaining eighteen members is in Table 7.3

Table 7.2 Personal information of 18 members of the IMA echelon

Age	over 55	54-45	44-35	34 less	total
	7	1	4	6	18
full professor	6	1			7
associate professor	1		4		5
lecturer/engineer				6	6
CCP membership	6	1	3	2	12

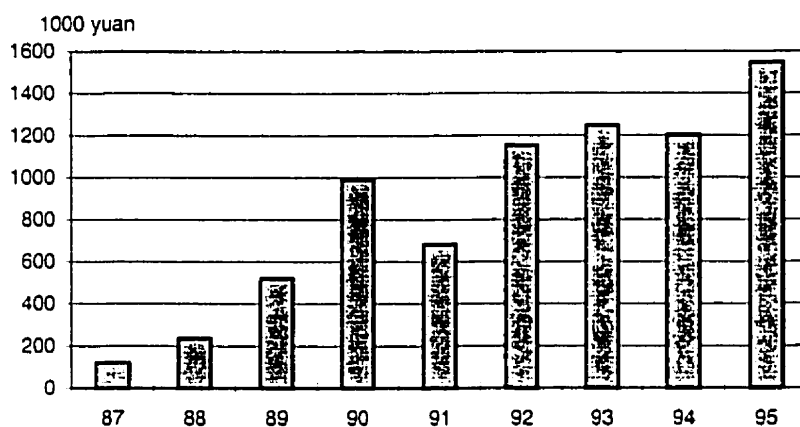
Source: Field notes

This echelon worked in two major fields: laser manufacturing technology and equipment and CIMS. The academic leader of this team was Professor Duan, sixty-one

years old. He was the head of the IMA and led eight members and about twenty post-graduates working in the field of laser manufacturing technology and equipment. Dr. Li, forty-seven years old, was vice head of the IMA. He earned his doctoral degree in the US. He led three members and about twenty graduates working in the field of CIMS. The other five members, two full professors and one young lecturer, were in charge of teaching five courses. Two members worked in the IMA laboratory.

This team had won several national and ministry and province awards since 1987. Its research funding was increased from 129,600 yuan in 1987 to 1,550,000 yuan in 1995, three times higher than the average increase of research funding received by HUST in the same period (see Figure 7.3).

Figure 7.4 The IMA research fund, 1987-95*



Source: Data from the SMSE.

* at the current price for that year.

Professor Sun was fifty-seven years old. He had been the party secretary of IMA since its establishment. He was the only associate professor in the senior age group (55 and over). Under his leadership, the IMA twice won the title of "Excellent Ground Branch of the Chinese Communist Party in Hubei Province" in 1988 and 1993 and a "National May 1st Model for Ground Work Units" in 1993.

However, the IMA had a problem. Dr. Li was appointed the Dean of the SMSE in 1995. He was the only person in the age group of 45 to 54. He had been trained as successor of the team leaders for a long time. But he could no longer play the expected role. Unfortunately, IMA was not prepared for this unexpected change. This raised a problem of leadership transition for this echelon.

The achievement of this team was very impressive, and its problem was very typical in echelon management. These were the reasons I selected the IMA as an example and conducted an interview with Professor Duan and the Party Branch Secretary Sun.

I knew Prof. Duan as I had cooperated with him on an educational project in 1987. But it was my first meeting with Prof. Sun. Before this interview, I collected the relevant information about this echelon and carefully prepared a list of questions. I did not give the list to them before or during the interview as what I wanted was mainly their views about their work, rather than their responses to my questions (Adler, Campbell & Laurent 1989). This interview started with a very general question: How should one lead an echelon under the current circumstances?

Duan (D): China has a specific problem for university research. In general, a process from idea to product can be divided into three steps: basic research, transformation and mass production. Basic research produces new ideas and prototypes, transformation improves the prototypes for commercialization; then the results are sent to factories for mass production. In advanced countries, a typical work division is that university research focuses on basic research, specific research institutes work on transformation, and factories take care of mass production. Through this system, ideas become products.

China's problem is that no one cares about transformation. Because of the lack of transformation, only about five to fifteen percent of the outcome of university research can become products. Most Chinese enterprises have no technical force to conduct transformation. Particularly since the 1980s, most large-size state-run enterprises have run into financial difficulty. Many of them can only pay their employees 75 percent of their salary.

Thus many experts in these enterprises have left. This has seriously weakened their technical force. So, enterprises prefer to form research contracts on a turnkey basis. This is a great difficulty for us.

For instance, we have a 1.2 million-yuan contract with Yilin Diesel Company on an automation line, consisting of several pieces of machinery. This is a government-sponsored important key project. As it is a turnkey project, we have to take care of everything from machine design, ordering parts, and installing machines, to testing and adjusting the line and then submitting it to the company. That means we have to conduct research, do business with parts suppliers, work with factory workers and keep good relationships with all partners involved. Much work has to be done in the field, and most is completely irrelevant to our research. However, if you do not do these things, your ideas will not become products, machines and lines. Whatever how great they are! In addition, I am very disappointed with HUST's policies about research outcomes. For instance, last year, HUST only counted articles and awards for academic promotion. Transformation work was completely discounted.

Zhao (Z): What do you mean?

Sun (S): For instance, we designed a laser cutting machine which won a national award. Some enterprises asked us to make a copy for them. Such projects are transformative. As the university discounted them in academic promotion, researchers were disappointed. This policy sets up barriers for our transformation work.

D: It was true that HUST published the most papers among all the universities [in China]. But to me, it is a bad sign. What is the mission of HUST? What should be the mission of HUST? Is HUST still an engineering university? Does HUST still serve the modernization of China's industry? If promotion only depended on writing papers, anyone could do it. Staying at home and writing a paper is much easier than going to factories to make machines. It is wrong, definitely! Some people studied abroad and brought the Western way to China. However, they have no idea that the way of working in the West may not work in China. In fact, this separates university research from enterprise.

Z: So, in such a situation, how do you lead your team?

D: I think an echelon can perform well if all its members can share common goals and principles, particularly on crucial issues. Our goal is very clear. We work for the modernization of Chinese industry. We are going to solve important and key problems in China's machine manufacturing industry. We prefer to be a mercenary army of the nation. You give us money and we fight for you to the death. This is the first thing. Second, we know we have to be realistic. Everyone needs to fill his (or her) belly and needs to be recognized. Satisfaction with promotion and earning are two issues that we always keep in mind. We must take the two issues seriously. In a word, we need to create an atmosphere in which everyone feels he can achieve something and does not need to worry about money and promotion as such. These are three priorities in our management. To address the three issues, the only way is to undertake key important and key projects. This is the reason we work very hard to bid on these projects. Such projects bring us achievement, reputation and research funds. By carrying out such projects, you can attract excellent researchers and develop the team.

Z: Could you give me an example?

D: Taking laser manufacturing technology as an example, we did not do any research on laser equipment before 1980. But we knew China imported US\$200 million worth of laser equipment every year. In the 1970s, the state started to promote laser technology intensively and built a key laboratory on high-energy laser devices at HUST. We decided to use this advantage to develop laser manufacturing equipment because we know machining automation. So, we invited the laser laboratory and the Beijing Institute of Machining, the best institute in China's machine industry, to join us in bidding for a key important project on laser manufacturing equipment in the Seventh Five-Year Plan (1986-1990). This was the best combination you could find in China at that time. So, we won the bid, a project with funding of 2.5 million yuan.

While conducting the project, we learned a lot from our partners and eventually developed a new field for ourselves. As we did a good job on this project, the subsequent projects came to us in the Eighth Five-Year Plan (1991-1995). We received a total funding of 6 million yuan. A machine we made was exhibited at the Beijing International Machine Exhibition, and the State Economic Planning Commission was very interested in it.

The committee invited me to develop a proposal for the Ninth Five-Year Plan (1996-2000). I am going to Beijing next week. Now we plan to integrate laser manufacturing technology, CAM, CIMS and FMS. With no exaggeration currently we are number one in China. No one can compete with us. With these achievements, we build our reputation, win funding and attract excellent researchers to work with us.

As to echelon management, we emphasize both individual autonomy and mutual aid. For instance, contrary to other research groups, we usually divide a big project into several sub-projects. Each member takes one and leads several students as a small group. Each group has its own funding. Heads enjoy complete autonomy of funding and project. This has two advantages. First, each group works independently. No one will feel he works for me. Second, each group can apply for awards with the outcome of its sub-project and write papers. Once the whole project is completed and has won a high-level award, everyone can tell clearly which is his group's contribution. Plus with group awards and papers, all the researchers will become very competitive in promotion.

S: We found this is a good way to organize research.

Z: When did you get this idea?

D: During the Seventh Five-Year Plan.

S: This way works well as each group has clear tasks and works independently.

Z: Does each group take its bonus from its funding?

D: No, no. The funding is for research, not for a bonus. The research bonus is distributed within the whole echelon. But generally the young people get more.

Z: How much?

D: About thirty percent more on average, fifty percent more in specific cases.

Z: Why?

D: The reason is very simple. The older people have a higher salary, and the young people badly need money. Originally, there was a debate on this issue: Whether the bonus distribution should be only according to work, or also relating to personal needs. Finally we convinced everyone that we need both. This is more reasonable. The young people are the future of our team. We should help them as much as we can.

Z: I guess the young people will appreciate this.

D: This makes them love the echelon. At the end of each year, we older people get together particularly to discuss bonus distribution. After we reach a solution, we just announce the total amount of the bonus for that year, but we do not state the quotas for each member. We put the bonuses in envelopes and give them to everyone. We ask them not to inquire what the others received.

Z: Why?

S: It embarrasses people and may cause problems.

Z: I have a question. It may be sensitive. Is there anyone in this team who works outside to makes extra money for himself?

D & S: We do not know of anyone so far.

Z: If you found one, what would you do with him?

D: If I found anyone doing this, I would have a talk with him. First, I would ask you (clearly here Professor Duan took me as the person who makes extra money) whether or not you had done your work well. Second, if you had done your work well and had nothing else to do, you should tell us. We have a lot of work waiting. Third, I would tell you clearly, this is not the *right* thing. The reason is very simple. The team treats you as an important member and cultivates you. How could you do this to the team? Your way may ruin the morale of the team. Finally and most important, what should be the purpose of your life? What are you working for? For money or for achievement? Did you see your life worth just a few pennies? If you have financial problems, you should tell us and we will help you! (Professor Duan became angry.)

Z: Your point is that the team should take care of its members and the members should work for the team wholeheartedly, is that it?

D: Yes. It is a matter of commitment. Whoever would do this (making extra money) would bring shame on himself. It is just as simple as this.

S: The senior members are good role models on this. We never even think of it, let alone do it.

D: This relates to the second issue: mutual care and help. Simply put, one should care for the collective and others first, then oneself. We have a young fellow, surnamed Yu, an associate professor. Yu is a quiet person but very creative. He created a new method of

cutting complicated curved surfaces with flat cuts. His idea is very unique. His research is also very complete, from the basic theory of cutting tool design and the cutting process control, to the related computer software. In my view, he actually presents a new approach in metal cutting tool design. He has published five articles in international journals, including "Materials and Processes in Manufacturing," a top international journal in the field. A foreign scholar invited Yu to write a paper with him. Yu asked the scholar to send his research to him (Yu), but nothing came. Later the scholar invited Yu to be a visiting scholar. Yu came to me for my opinion. I asked him: "What is *your* opinion?" Yu said: "I will not go. I guess this is his way to get my research results. I cannot give them to him as they belong to this team, not just to myself." I was so touched by his words.

A few years ago, three people on this team, Yu and two others, applied for promotion to associate professor the same year. Of them, Yu was the more likely to be promoted. The Dean of the SMSE had told me Yu would have no problem in being promoted as long as he applied. But it was impossible for the IMA to get a quota of three associate professors (see Chapter 8). Actually, I assumed that only one IMA member could be promoted that year. I intended to recommend him first. However, he came to me and asked if he could withdraw his application. I disagreed with him as I was afraid that we might lose the quota for the IMA. You know, promotion is actually a competition among all units within the SMSE. Yu said to me: "Professor Duan, it is very possible that the votes for the three of us could be scattered and eventually none of us will be promoted. However, if the others are promoted this year, it would be easy for me to be promoted next year. Besides, I would say that they worked much harder than I did. They spent a lot of time in the factories. So they had less time to write papers. Even just for task assignment, they should be promoted first. If they had not worked in the field, we could have achieved nothing." His words were very reasonable. But I still insisted he should apply. Later, he withdrew his application without informing me. I knew this only at the promotion meeting. The Dean asked me why Yu did not appear on the IMA list. I told him that we planned to recommend him next year. Of course, he was promoted next year. But he is a good man, one with integrity in both morality and academics (*decai jianbei*). Recently,

we assigned him as the chief engineer for a key project in the Ninth Five-Year Plan. Besides we are going to recommend him as full professor next year.

Z: In other words, you plan to train Yu as an echelon leader, is that it?

D: Yes. One can achieve a great deal as long as one has opportunities. So, we need to give our young people opportunities. Actually this thing bothers me most. I am sixty-one years old. I should retire now. My plan is that with the help of Dr. Li, we can lay a solid foundation for this team in the Ninth Five-Year Plan, then transfer the leadership of the team to the young people.

S: One thing is crucial for this transformation. How can we let our network know and accept our young people. You know, we accumulated these network relations over many years and developed very good relationships with them. This is a great asset of the team.

Z: It seems very difficult. It is hard to imagine that your connections could treat your young people as the same as they treat you.

D: It is not necessarily true. Let us take Dr. Li as an example. Li came back from the US in 1987. We made a great effort to transfer this team to him. We decided all important issues together. I introduced him to all of our network: "Dr. Li earned his doctoral degree in the US. He is very capable. He will be the leader of our team." Now he is a member of the 863 Expert Group [of CIMS]. In order to let people know him, Sun vacated his position as the chief secretary in the National Association of Automatic Manufacturing for Li. Now Dr. Li is well known in this field. After people know him better, I will give my chair position in the Association to Li. This is our way of leadership transition. You see, we have been doing it for years.

Z: But how could he make so many academic achievements in a few years?

D: Bluntly, all of our works are a team efforts. Everyone contributes to them. The bottom line is that you cannot clearly tell who makes more contributions. Can you say that the people in charge of project design contribute more than the people working in the field? No! This is the nature of our work. Therefore, all papers, awards and other results belong to the team, and we give them to the people who need them most.

Z: You manipulate the outcomes?

D: You can say that. Our experience is that in order to accomplish our goals, we need an ambitious goal and a well-organized troop. It is absolutely impossible to achieve our goal if people work as disorganized soldiers. Thus, in this team, all resources are managed according to the team's plan. Results do not belong to individual. Take promotions for example. Each year we make a plan for promotion. We appraise the situations of our unit and the other units [of the SMSE]. Then we select some members and recommend them for promotion. Some of them may be competitive enough, but some may need extra help. Once decided, we give the results to the people who need help to make them competitive. This is the way we deal with our results. If we plan well, everyone will be promoted very fast as long as the team is productive. For instance, this year we decided to recommend Sun as full professor. Sun has done a lot of work for this team over the years. But he is the only associate professor among the older members. So, we assigned him as leader to a key project with one million yuan funding. In addition, we have won two awards this year. We put Sun at the top of the nomination lists. In short, the results of this year will go to ensure Sun's promotion. We treat everyone in the same way. So, no one needs to fight for promotion by himself.

Z: This is your way to solve the problem of promotion.

D: Actually, we solve all such problems in similar way. For instance, I was the person who led a project which won an award in this year. But I was the last one among the awardee list. I had to put my name on the list as I was in charge. Otherwise, I preferred to leave my name off.

Z: Why?

D: Why? Someone else needs the award. It is extremely important that if we care for everyone well, everyone will contribute more to the team, and eventually the team can grow. In addition, since everyone made a contribution to the award-winning work, how could I always put laurels on my head? If I took the awards, what about the others?

Z: Why do you think in this way?

D: To me, this team is like a family. The older members are like older brothers and the young people like our younger brothers. If the family is disrupted, everyone will suffer, believe me.

Z: This is an interesting idea, “team like a family.”

D: I can tell you that family is the most important cell for any society. It is a most important concept for us. Foreigners might have difficulty understanding the Chinese family and family relationships. But I always see this team as my family.

S: Each year we hold a New Year’s party and invite all team members and their families to join us. A total of more than one hundred people get together, a real big family!

D: This year we made a video. And I brought it to Britain to show our members there. They were very happy. They watched it again and again and asked me about everyone at home. This is love. I know some people stay abroad after their studies because there is poor interpersonal relationship within their unit. But all people from this team will be back. In a warm family, people care about each other. It makes the team attractive.

Z: You have mentioned “family” twice, so I have a question for you. What is the difficulty in being the head of a household (*jiazhang*)?

D: I am not a head of a household.

Z: I know. I am using it as a metaphor. My question is from a story about heads of families. In the Tang Dynasty, there was a prime minister who had a big family with nine generations under one roof. The emperor praised him and asked how he could handle such a big family. He gave the emperor one word: “tolerance.” What is your comment on his answer?

D: I agree with him. It is true.

Z: Could I have more details?

D: Sun knows me very well. I have a bad temper. I can control myself usually, but sometimes I lose my temper. But, I have a principle: Treat all members honestly. So, all members forgive me if I lost my temper. It is not true to assume that this team has no problems. Particularly in today’s market economy environment, the negative effects of the market economy, e.g., seeking for self interest and ignoring the collective, have influenced some young people. You can tell this from their behavior. I have no tolerance for such behavior. I am definitely against it. However, as to different opinions on work, I insist that anyone should be free to express his opinions, even criticize the others, but to criticize problems, not personality. If one came to me and bad mouthed someone, I would

criticize him. We have insisted on this principle for many years. So, all team members share this principle.

S: Besides, as a team leader, you should really care about all the members, even looking at very small issues if they cannot solve these by themselves. For instance, we have a member who is in Britain for his degree. His father lived in his apartment which was convenient for him to see the doctor at the university hospital. However, last year the university asked the member to return his apartment. His father complained. Once I knew this, I went to see his father and told him that he could live in a temporary apartment. If he had financial difficulties, we could help him. But he had to return the apartment to the university. Finally we paid part of the rent. His father moved into a temporary apartment. Later, the member wrote us letters to express his appreciation. Such things are small but relate to people's feelings. You should put your feet in their shoes. If you are careless, you hurt people.

Z: I have found that the echelon has four sensitive areas: 1) distribution of research funds, 2) nomination of awardees, 3) distribution of research bonus, 4) dealing with academic promotion. I learned a lot from you on how this team deals with these issues. Essentially you both emphasize a view of collectivism. Your point is: everyone should care for the collective and the collective should care for everyone. In addition, you use the metaphor "family" for your team. By this you emphasize that the senior members should educate and care for the young members and then transfer the "family" affairs to them.

D: These are our experiences.

Z: But I have another question, maybe a little bit sensitive too. Do you think this team can survive in today's environment?

D: I think this team can survive as long as Dr. Li can spend some time on the team.

Z: I do not think so. Dr. Li has been appointed Dean. He may not have much time for this team. Besides, this team has no one in the middle-aged group except Li.

D: This is a problem. Fortunately we will have a member back from Britain next year. This person is very good in both morality and academics just as Yu is. But some young members do need to improve as to quality (*suzhi*).

Z: "Quality"? What do you mean by "quality"?

D: It means one should care for others more than for oneself.

Z: Morality (*de*)?

D: Yes, that is it.

Z: In other words, you do not worry about their *academic quality* but their *moral quality*?

D: Yes.

Z: So, to me, this echelon was actually propelled by a kind of collectivism. Am I correct?

D: It is correct. I think the worst influence of the market reform is that it is against our collectivism. If we have trouble, it must be caused by this. If we can avoid it, we can grow.

S: Put simply, this is a challenge of individualism to collectivism.⁷

D: Yes, this is the problem. But we are lucky. Most younger members assigned to this term are very good.

Z: It is not reasonable to call it “luck” as most of them were your previous students. Actually they are selected by you both. Is it true?

D: This is true (smile).

Z: Do you have any comments on my summary about your team, i.e., “team like a family”?

D: I think it is accurate. But I should like to emphasize two points. First, I feel the most important thing is to create an ambitious goal for the team and maintain it. This is the soul of this team. As well, we need collectivism as guidance in dealing with operational issues. Second, I consider the metaphor of the family is proper. But, be careful, [you] should not introduce it [to the Westerns] like a feudal patriarchy. As I said before, foreigners might not understand our family properly.

Z: This is why I ask your opinions.

D: Right (smile).

At this point, Professor Duan left. I continued my interview with Professor Sun on the role of the CCP secretary in echelon management (also refer Chapter 11).

Z: Could I have your personal story?

S: I graduated from this department in 1964. After graduation, I was kept on as a student instructor. In 1968, HUST sent a team of twenty five teachers to Shanghai for a project, an automation line for China's No. 2 Automobile Factory (the largest truck factory in China). This line consisted of five machines. I was appointed as the team leader. Duan was a leader too, in charge of technique issues.

Z: I am just curious. Why were you appointed as the team leader?

S: Perhaps because I was a party member. We worked on this project for five years. It was very successful. This line was exhibited at an international machine exhibition and won a gold medal. After the project was finished, I was elected as the party secretary of the Teaching and Research Group of Mechanic Manufacturing Automation. In 1984-1986, I was sent to Iraq as an expert engineer. When I came back, the group had split. Most teachers left. The rest, about fifteen, were organized as the IMA. They elected me the party secretary again. I guess that Prof. Duan asked me to work with him because we had cooperated very well for many years. We knew and trusted each other. Since then I have been the secretary of the IMA. This is my story, simple.

Z: Could you tell me something about your work?

S: More or less the same as we said before. I think I have three foci for my work. I consider the senior group as a role model to be quite important. It strongly influences the young. We need to keep this tradition. As to the young people, we emphasize guiding them in the right direction and promote their enthusiasm in work and their devotion to the team. For instance, most young people in this team were involved in the 1989 incident. After that, we helped them and let them know their weakness. But we did not punish anyone. The young were involved in this event because they love this country. Their patriotism needs to be protected.

Z: You *do* protect them.

S: However, the young indeed have weaknesses.

Z: What are their weaknesses in your view?

S: Sometimes, they consider themselves more and care for others less. Besides, they need a more experience to deal with things properly.

Z: What is this?

S: For instance in decision making, they may forget to ask others' opinions. This kind of thing is very small but it does hurt people and causes trouble.

Z: How do you deal with their weaknesses?

S: Actually they need coaching. You know, Duan is going to retire. I asked him to postpone his retirement for two or three years. Duan is a good coach. He can accompany the young members operating outside, introduce our network to the young and show them how to deal with people and things properly. In some cases, the young members make mistakes just because of their lack of social experience. But such a mistake may jeopardize a contract. I always tell them that academics is just one side, social skills is the other side. You need to improve yourselves on both if you want to achieve something. We work in the engineering field. You have to know how to deal with people properly.

Z: How do you deal with the party's (CCP) activities (*zuchi shenghuo*)?

S: We have a biweekly meeting. But it is flexible. We hold a meeting if there is something from the top. But I prefer to deal individually. Meetings are only good for dealing with common issues. For individual problems, private conversations are more effective. For instance, one day, a teacher ran to me and said that Prof. Duan was losing his temper with a member because the member made a mistake in signing a contract. This teacher asked me to stop Duan. I said to him: "This is not a good time" A few days later, after I investigated the whole thing. I had a talk with Duan privately. I said to him: "You have signed many contracts. So you have experience. This person had no experience. How could you expect him to do as well as you did? In addition, you did not make your ideas clear. Then you blamed him and lost your temper. It is not fair to him."

Z: What was Duan's reaction?

S: He did not say anything. Later, I was told that he apologized for his behavior.

Z: From what you said about your work, I feel you did a lot of management work, not only the party work.⁸ Am I correct?

S: It is correct. But I have to do it. You know, last year, Duan was away more than one hundred seventy days. He also spent half a year away this year. In such a situation, who would take care of the day-to-day management if I did not do it?

Z: What do you do if Duan is not here?

S: I attend all meetings on behalf of the team, fill out various forms and solve various problems. We divide the work. He takes care of academic work and outside affairs, and I take care of the daily operations at home. But I have to say it is just a rough job division. More precisely, we share all the duties.

Z: In other words, in this team, the party is not separated from management work.

S: Yes. Not just in this team. To my knowledge, the two systems at HUST are not separated at all.

Z: There must be some reasons for this. In your view, what are they?

S: The two system are entwined. They must go together. You cannot separate them. At the TRG level, all party works are done through management works. Otherwise, the party work is empty. For instance, as we said earlier, if I cannot resolve people's problems, no one will come to me. Without knowing people's problems, how can I help them, guide them, or correct them? This is management as well as ideology, isn't it?

Z: You always do your work in this way?

S: How else could it be?

Z: Do you consider that your way is typical, do the other secretaries at the teaching research group level at HUST work similarly?

S: Yes, from what I know. My way is not special. Everyone else dose the same.

Z: But you won the medal.

S: Maybe, I spent more time on it (smile). But the way and the principle are the same. Time makes the difference.

Z: But the two systems do cause some conflicts.

S: So, the two heads should cooperate each other.

Z: How about merging the two systems? I mean, let one person takes both duties.

S: I do not think this is a good idea.

Z: Why?

S: First, who takes care of the daily operation if this person like Duan is away? Second, who corrects this person if he goes in the wrong direction?

Z: So, you consider that it is necessary to have two heads but they need to cooperate well.

S: Yes. This is the reason that we worry about the selection of a new team head from the young members.

Z: What are your criteria?

S: Excellence in both academics and morality (*ge ren dao de pin zhi*)

Z: Do you have any candidate if Dr. Li cannot take care of this team?

S: Not yet.

An Analysis of the Management of the Academic Echelon

In order to know why the echelon is effective and what are its weaknesses, the study of the IMA echelon involved four issues: internal social structure, organizational values, management, and leadership transition.

Internal Social Structure. There is a social hierarchy in the IMA, which is highly associated with age: the seniors (over 55), the middle-aged (54-35) and the young members (34 and less). These different age groups have different social characteristics. All members in the senior group were full professors in 1996. Six of the seven were the party members. They are the core of the team in terms of guiding academic development, management and maintaining organizational values. All members of the middle-aged group had senior academic titles: one full professor in the group of 54-45 and four associate professors in the group of 44-35. Four of the five members were the party members. Of them, two had been selected as the successors of the team leaders. They were major assistants to the senior members. All members in the younger group had lectureships or the equivalent. Two of the six were the party members. If taking the party membership as an indicator of loyalty to organizational values, one can see that the members in both the senior and middle-aged groups were highly loyal to their team. The younger were less loyal. This may give a cue that the two team leaders worried about their “young members.”

Organizational Values. The IMA had three organizational values: ambition for great achievements, collectivism and egalitarianism

Ambition for Great Achievements. Duan emphasized that it is “the soul of the team.” In order to achieve, this team needs collectivism and egalitarianism. In his words:

Our experience is that in order to achieve greatly, we need an ambitious goal and a well-organized troop. It is absolutely impossible to achieve our goal if people work as disorganized soldiers. Thus, in this team, all resources are managed according to the team’s plan. Results do not belong to the individual. ... I feel the most important thing is to create an ambitious goal for the team and maintain it. It is the soul of this team. As well, we need collectivism as guidance in dealing with operational issues.

It is very possible that Prof. Duan would give me a “No” if I asked him, “In your opinion, should the team members stay loyal to the team if the team could not bring them the desired achievements?” In short, in Duan’s view, ambition for achievements is a goal value, collectivism and egalitarianism are instrumental values, just for operation. This makes the team value system fundamentally *different* from the Chinese traditional family value system. An echelon is designed for competition, thus ambition for great achievements comes out as the first fundamental value. In contrast, in the Chinese family value system, collectivism and egalitarianism are the fundamental values because families are not designed for competition. In this view, the team is *not* like a “family.”

Collectivism. The most significant phenomena in the IMA team are its collective ownership of its results and its way of distributing its outcomes. As Duan said:

Bluntly, all of our works are a team efforts. Everyone contributes to them. The bottom line is that you cannot clearly tell who makes more contributions. Can you say that the people in charge of project design contribute more than the people working in the field? No! This is the nature of our work. Therefore, all papers, awards and other results belong to the team, and we give them to the people who need them most.

This collectivism of ownership and the related outcome distribution lays a solid foundation for both external competition and internal work division. This feature makes the IMA echelon very competitive in bidding for research funds and in winning awards. As a consequence, it also bring considerable benefits to all of its members.

For instance, in 1995, the ratio of senior academics to junior academics in the IMA was 67 percent (twelve to six) and in the SMSE was 61 percent (see Note 6 in this chapter) and in HUST was 48.5 percent (see Table 8.2). The average bonus in HUST was about 2,700 yuan, and the IMA members enjoyed a bonus of 7,500 yuan on average.

The collectivism makes possible the internal work division. The competitiveness of the IMA clearly resulted from its internal work division. As we see in this team, some strove for key projects outside, some conducted basic research at home, some worked in factories and some dealt with operational work. However, to enhance this work division, all members should be treated fairly. Thus a collectivism of ownership and the outcome distribution is inevitable.

However, as an echelon is a conventional organization, that is, not built upon formal regulations and contracts, this kind of collectivist ownership and outcome distribution are not guaranteed by official regulations or laws. This raises a question: can this collectivism of ownership and outcome distribution last over time? Clearly it depends heavily upon the moral integrity of the team leaders. This makes team leader selection crucial and puts the echelon at risk.

Egalitarianism. It is a consequence of the collectivism ownership. The IMA echelon had two methods in its result distribution. For the research bonus, the IMA echelon assumed that the personal total income, salary and bonus, should be controlled within a reasonable range. In Duan's words:

The reason is very simple. The older people have a higher salary, and the young people badly need money. Originally, there was a debate on this issue: Whether

the bonus distribution should be only according to work, or also relating to personal needs. Finally we convinced everyone that we need both. This is more reasonable. The young people are the future of our team. We should help them as much as we can.

Egalitarianism on academic promotion can be termed as “waiting for one’s turn.” Information in Table 7.3 shows this. The arrangement for Sun’s full-professor promotion is another example of this. “Waiting for one’s turn” convinces all team members that everyone will be promoted to the highest rank. One does not need to fight for promotion by oneself. The team will take care of it as long as s/he makes enough contributions to the team. This way works very well. The team actually brought more opportunities for promotion to its members.

Management. Two significant management features in the IMA echelon are:

- team as a “family”
- team leadership, including selection, cultivation, leadership transition and moral integrity of team leaders

Team as a “family.” Both Duan and Sun agreed with this point: team is like a family. As team leaders, they made great efforts to establish positive, constructive morale in the team. They managed the team through care, help, guidance and criticism. Mutual care is essential in their management. These are common in Chinese families.

As the party secretary, Sun cared for all daily operational tasks and let Duan have time managing outside affairs. In this way, Sun supported Duan and helped him keep the team together. It should be noticed that Sun considered this a typical way in carrying out the party work at HUST. This is a case to show how the party work was actually carried out by the party secretaries at the ground level.

From his experience, Sun argued that the party organization could be destroyed, at least at the ground level, if the party system was separated from the administrative system. This was a clue to the reason why the separation met a strong resistance from its beginning and eventually failed in 1996 (for details see Chapter 11).

Taking the family as a metaphor, I viewed Sun as a house spouse. He took care of housework. But he was not in a support position, rather, he shared the duties with Duan. Sun was the cement holding the team together.

Team Leadership. Leadership is crucial for success of the echelon. The significance of the IMA case is its methods of leader selection and leadership transition.

The IMA method of leader selection was much like a bee colony. First, the echelon selected a member as the future leader. Once the leader was selected, the team invested him with the team assets. The team gave the future leader the greatest opportunities to make him succeed and supported his success with all its strengths. This made the future leader very competitive.

Also, there was a training procedure for the future leader. He would start as the chief assistant and then share part of the leadership with the old leader and eventually would replace the old leader. This training procedure is also a process of leadership transition. What the IMA team did with Dr. Li and Yu were examples of this.

However, this procedure has two potential problems. First, the team selects only one future leader. If the unexpected events were to happen to the future leader and the person could not perform his role as expected, this would cause a crisis in the leadership transition.

For instance, Dr. Li was trained for years as the future leader. But he was appointed dean. He could not fulfill his IMA role as expected. This caused a crisis of lead-

ership transition in the IMA echelon. I also observed another similar case in the SMSE during my fieldwork. In other words, such cases are not rare.

To save the team from this leadership transition crisis, the measures in the case of the IMA included: prolonging Duan's retirement, asking Dr. Li to share a part of the duties and selecting and quickly training a new leader. This is a weakness of the echelon.

Why does an echelon not prepare two future leaders in case of unexpected events? I discussed this question with several administrators and researchers at HUST.⁹ We concluded that three reasons make this idea impractical:

- Preparation of future leaders costs a lot of resources of a team. An echelon may not be able to afford it.
- Preparing two team leaders itself is risky as the two leaders may split the team.
- If no unexpected events happen, it will cause a dilemma in choosing who will be the new leader. If the loser leaves the team, the team's investment in him will be lost.

Second, the leadership relies heavily on the personal moral integrity of its leader. Both Duan and Sun share the same view that a team leader should have integrity both academically and morally. The selection of Yu is an example of this. If we refer to morality as a kind of informal institution, the requirement of morality for a team leader results from: 1) the echelon as a kind of informal organization, and 2) the echelon needing to invest in its leaders. Obviously such an investment is highly risky, like an investment in a firm without asking for a contract, the only guarantee of such an investment is the moral integrity of the receptor. The team has to be very careful before it invests in anyone. This is in my view the core idea of the morality requirement for a team leader.

However, once a team invests in its leader, this investment will make the leader a debtor. The more a team has invested in him, the more debt the leader owes. As a result, the investment binds the team and its leader tightly. If a team leader claims clearly that his achievements come mainly from the team and commits to return this favor to the team by

leading the team forever, he will be regarded as a person with moral integrity. Otherwise, he is immoral, like a debtor refusing to pay his debt and interest to the investor. From this viewpoint, team leaders must prepare to sacrifice themselves to the team, they have no other choice if they care for their moral reputation. As a result, they are not free to leave the team and have to be nice to their teammates. Gradually, they lose their individual identity and become models for the team. In contrast, the teammates enjoy more freedom. This is the other side of being a team leader. My story about the heads of household implies this point. Duan obviously felt it deeply, but he would rather not touch it. However, through this mechanism, an echelon can grow and achieve greatly.

Future of Echelon. China's market economy reform is a two-edged sword for echelon. On one hand, the echelon benefits from the market reform as it creates an environment for competition. This gives the echelon more opportunities for achievements. On the other hand, the reform challenges the echelon's organizational values, e.g., collective ownership and egalitarianism, as the market reform disposes individuals to promote their own interests. This creates a contradiction between the echelon's collectivism and individualism in a market economy. Indeed, the echelon can provide higher average benefits to all of its members. But it does not give the extra benefits to its most capable members. On the contrary, it controls the range of differences between the lowest and the highest because the echelon's collective ownership and egalitarianism ask that all outcomes should be shared among all team members. If not, an echelon will run into a bad cycle.

The researchers at HUST also experimented with other forms of teams, e.g., contract-based research teams. It seems that the contract-based teams were not as competitive as the echelon because the contract-based teams do not enjoy the stability of an echelon. An echelon can pursue its goal in the long term, but the contract-based teams are good only for short-term cooperation. Thus, echelon is actually the most effective form of research team at HUST. In my view, the echelon still has a bright future in a market economy environment if it can control its potential problems.

In this chapter, we examined the university research management, particularly focused on academic echelon, one of the most effective organizational forms of research team at HUST because the dynamic of university research is from the bottom. In order to explore the strengths and weakness of academic echelon, this chapter discussed the environmental factors, the echelon's interior social structure, value system, management features and leadership by using the example of the IMA echelon.

Research is a new priority for Chinese universities. This resulted from two major factors: China needs universities as a research force for its modernization and HUST has to generate more money to resolve its financial difficulties.

The resources for funding university researches are scattered, and project bidding is highly competitive. There are two kinds of research funds: vertical and lateral. Vertical funds are from government bodies to support the projects which are important for the nation and individual industries. Lateral funds are from enterprises. Vertical funds are usually for the key and important key projects. The funding strength per project is higher. Thus, vertical projects can bring the project carrier a large research fund, high-level awards and academic quality improvements as well. In contrast, lateral funds do not enjoy these advantages. For bidding on and conducting important key and key projects, the academic echelon, a specific research team, becomes very competitive and effective.

The echelon is a form of research team with an interior hierarchical structure of three or four levels. By studying the case of the IMA echelon, one can see that the competitiveness and effectiveness of the echelon resulted from its work division, collective ownership and interior distribution institutions. For the IMA, three team values are essential: ambition of great achievements, collectivism and egalitarianism. The first is the goal value and the other two are instrumental values. Collectivism is showed particularly in the collective ownership of research outcomes. Egalitarianism is showed clearly in bonus distribution and academic promotion. To maintain this value system, the echelon

needs a strong organizational identity. The party secretary plays a significant role in this. He does this job through daily operational work.

An obvious problem in echelon management is its leadership transition. An echelon usually selects only one successor for its leadership and gives the person special training and opportunities to make him competitive. The team expects this successor will lead the team. This arrangement has two potential problems. First, if this successor could not play his expected role for any reason, the echelon would run into a crisis of leadership succession. Second, this arrangement makes the team's future rely heavily upon the moral integrity of the team leaders. It is risky.

The more serious challenge to echelons is from China's market reform, as it disposes individuals to seek their own interests that directly challenge collectivism and egalitarianism, two major basic values of echelon. Even so, the echelon is still the most competitive organizational form of research team in university research at HUST.

¹ By copying the former Soviet Union, China's academic system was separated into two systems: academy system and university system. The academy system, including systems of China's Academy of Science and China's Academy of Social Science, focused on research. The university system focused on education. Thus, research was mainly carried out by the academy system, rather than the university system.

² At the time of writing, there are two methods to estimate the value of the Renminbi "yuan." One is using the market exchange rate of Yuan to US\$. This rate in Oct. 6, 1995 was 8.32:1. With this exchange rate, China's income per capita was about 490 US\$ in 1993 (1996 Britannica Book of the Year p. 584. Chicago: Encyclopædia Britannica, Inc. 1996). However, this way was criticized as under-estimating the value of yuan. The other method is called the purchasing power parity, that is, to estimate the purchasing power of local currency in a local setting with the purchasing power of other currencies in their local settings. By this method, the International Monetary Fund asserted that China's per capital GDP was 2,470US\$ instead of 370US\$ in 1992 which was calculated based upon the market exchange rate in 1992, about 6.68 times higher than the estimation based on the market exchange rate. The exchange rate of yuan to US\$ in 1992 was 5.75:1 (1994 Britannica Book of the Year, p. 396, p. 584. Chicago: Encyclopædia Britannica, Inc. 1994). Thus the ratio of yuan to US\$ was about 0.83 : 1 rather than 5.74: 1, if the calculation is based upon purchasing power parity (the formulation is: $6.68: x = 5.75 : 1 \Rightarrow 1: x = 0.83 : 1$). That is, the purchasing power of 1 US\$ was equivalent to the purchasing power of 0.83 yuan, rather 5.74 yuan in 1992.

³ The enterprises here only included state-run ones, excluding foreign-fund, private and most of the collective enterprises.

⁴ The "863 plan" was made by the State Council of China in 1986, specially focusing on funding important key industrial innovation and diffusion of projects. The State Council invited experts nationwide and organized them as "863 expert committees" in every field advising the State Council on relevant issues. For instance, the State Council decided to develop the technology of computer intelligent manufacturing system (CIMS) in machine manufacture industry, and so organized an 863 expert committee for the machine manufacture industry and an 863 expert group specialized in CIMS. This group was called the 863 Expert Group of CIMS.

⁵ This number came from my interview with Professors Duan and Sun. According to a survey (n=551) on undergraduate student personal expenses at HUST conducted by the Department of Student Affairs of HUST in 1995, the average expense was 216 yuan per month. In 1995, postgraduate students did not pay their tuition and rent. They only paid for their food and entertaining.

⁶ In 1995, the SMSE had six institutes, three departments, four TRG for stream courses and 402 staff. Of them, 63 were full professors, 105 associate professors, 90 lecturers, assistant lectures, 16 senior engineers, 39 engineers. Two professors of SMSE were selected as members of China's Academy of Science (SMSE 1995).

⁷ In the Chinese dictionaries, the word "individualism" is often equivalent in meaning to "selfishness." It is not necessarily related to the meaning of "individual independence." For instance, in Xinghua cidian [New Chinese Word Dictionary, Beijing: Commercial Press, 1993], the word "individualism" has been given a definition of "thoughts and behaviors which are from individual interests, selfishness and self-centeredness" (p. 289).

⁸ See Chapter 11 for detail.

⁹ I am indebted to Jian Kai, Zhong Shuha and You Dahai for their insights on this issue.

Academic Personnel

Human resource management in China has been considered very different from that in the West. As it embodies the fundamental social and organizational values of a given society, one should not expect that the human resource management in China will be the same as that in the West. But what does Chinese human resource management look like? There are very few studies on this issue that provide a systematic description and reliable data in the literature. This chapter will address this issue with the case of HUST, particularly focusing on the academic personnel.

It should be noted that human resource management in China is experiencing a radical change because the market economic reform aims to build a labor market system to replace the existing lifetime job-guaranteed work system. Obviously the reform will be revolutionary for the current system. However, this reform has met with strong resistance since its beginning and has caused social tensions. So the Chinese Communist Party has become very cautious in pushing labor market reform, particularly in the large-size state-run enterprises. Thus, another concern of this chapter is, by studying the case of HUST, to find what is the resistance, where it comes from, how far the reform has gone and what its future will be.

This chapter has six sections. Section 1 is a general picture of the HUST personnel structure. Section 2 is about academic recruitment and its influence on the HUST community. It will show why academic “inbreeding” was inevitable and what are its consequences. Finally it is concluded that there had been no academic labor market in China

in 1995. Section 3 is about on-job training as it was a major means for the academic quality improvement. Particular attention is given to HUST's study abroad program and the impact of international intellectual migration on HUST as it is also an issue that has attracted much attention but rarely had studies with systematic data. Section 4 is about HUST's evaluation of its academics. Section 5 is about promotion. It will first introduce HUST's academic promotion system and work procedure, then present a case that shows how non-academic concerns influence academic promotion. Section 6 is about earnings. It is another subject that attracts much attention but had few studies with systematic and reliable data. Thus, this section introduces the history of China's academic salary changes, presents the actual changes in the case of HUST, estimates the academic earnings at HUST in 1995, compares the earnings with that at the national and provincial levels, and finally analyzes China's characteristics in wealth distribution. In the summary, it is concluded that people seemed unready for a labor market, and the institutions of employment and payment did not support the labor market reform. Thus, it may take a long time for China to transfer its lifetime job guarantee employment system to a labor market system.

Personnel of HUST

This section begins with the personnel structure of HUST, then introduces two changes in the 1985 reform and the academics structure changes from 1985 to 1994.

Personnel Structure of HUST

HUST had six kinds of staff: academics, administrators, support staff, workers, staff in the social-service system and the retired. The first four were the staff who support HUST's normal routines. Support staff refers the people who worked at libraries, laboratories, computer labs, the university press, etc. Workers refer to physical workers like cleaners and door guards. The fifth were the staff working at HUST's social service-system like the kindergarten, the primary and secondary schools, the hospital, the hotels, the transportation team and so on. They represent the living-side of HUST. The work force of HUST consisted of the first five categories. The retired people were out of the

work force but they were still counted as HUST members and cared for by the university. This can be analogous to the traditional Chinese family where the aged parents usually live with their family. Table 8.1 presents personnel structure of HUST from 1978 to 1994.

Table 8.1 Personnel structure of HUST, 1978-94 *

year	acad.	%	admin.	%	sup. s	%	worker	%	so. s.	%	total	retired
1978	2092	44	610	13	140	3	751	16	1110	24	4,703	N/A.
1979	2180	45	428	9	221	5	803	17	1187	25	4,819	N/A.
1980	2247	44	565	11	275	5	985	19	1058	21	5,130	86
1981	2350	43	577	10	378	7	1127	2	1090	20	5,522	207
1982	2533	45	606	11	425	7	1019	18	1094	19	5,677	105
1983	2499	45	628	11	409	7	1048	19	979	18	5,563	396
1984	2401	43	748	13	448	8	1011	18	1006	18	5,614	452
1985	2468	44	713	13	533	9	867	15	1038	18	5,619	495
1986	2720	46	689	12	869	15	611	10	1046	18	5,935	619
1987	2776	45	524	9	802	13	907	15	1127	18	6,136	770
1988	2857	45	749	12	853	14	636	10	1202	19	6,297	878
1989	2710	44	709	12	956	16	595	10	1150	19	6,120	969
1990	2734	44	789	13	971	16	562	9	1137	18	6,193	1,022
1991	2791	45	748	12	1042	17	486	8	1176	19	6,243	1,108
1992	2687	43	819	13	1222	20	218	4	1250	20	6,196	1,229
1993	2686	45	855	14	1259	21	237	4	939	16	5,976	1,350
1994	2699	46	792	13	1215	21	222	4	957	16	5,885	1,508

Source: Data from the CCP General Office of HUST.¹

* acad. = academics, admin. = administrator, sup. s. = support staff, so. s. = social service system staff. Casuals are excluded. The percentage only included the first five categories, the work force of HUST.

From this structure, one can see four features:

- In the total work force, academics were 43-46 percent, the administrators about 9-14 percent, and other staff about 32-48 percent.² The huge amount of non-academic work inevitably drew the university leaders' considerable time and energy away from academic affairs.
- Workers declined from 16 percent in 1978 to 4 percent in 1994. The positions were left to students and casual workers.
- Staff in support and social-service systems increased from 27 percent in 1978 to 37 percent in 1994. The support staff increased from 140 in 1978 to 1,215 in 1994. The reason for the increase was to offer jobs to spouses and children of staff in order to give them a stable family life on the campus.

- The retired increased rapidly from 86 in 1980 to 1,508 in 1994. That is, care of retirees had become a heavy burden for HUST (for details see Chapter 9).

Changes in Personnel Management

Two changes relating to personnel management occurred in all Chinese universities including HUST after 1985. One was linking university budget to personnel. The other was adopting multiple approaches in personnel management.

Changed budget approach. After 1985, the State Education Commission (SEC) changed its budget approach for its universities. Before 1985, a university budget was based upon the previous-year budget, plus a budget for changes in the coming year. This budget approach was called “a basic budget plus budgets for development.” This was an expense-oriented budget approach. Under the approach, the more staff a university had, the more salary the university would pay, and the more budget the university would get from the SEC. In this view, this budget approach was staff-based.

After 1985, the SEC changed this approach to a student-based budget approach. That is, the SEC gave a standard portion amount of the budget to each student, called “quota per student.” The exchange rates from undergraduates to master’s and doctoral students were 1:2 and 1:3 respectively.³ In addition, the SEC gave individual universities special additional money according to their particular needs, e.g., a research fund for key universities. This part of the budget was called “special subsidies.” Thus, the new budget approach was called “total student quota plus special subsidies” (*shengjun ding’e jia zhuanbie buzhu*). The purpose of policy was to encourage universities to control their staff size and work their staff effectively. It should be pointed out that this policy did not have the intention of encouraging universities to increase their students; as we saw in Chapter 5 it was controlled by the SEC.

Now let us estimate the effects of this policy on HUST:

- HUST reduced its undergraduates from 9,731 in 1985 to 8,477 and increased its post-graduates from 47 (doctoral) and 751 (master's) in 1985 to 394 (doctoral) and 1,132 (master's) in 1994. The equivalent student number was increased from 13,700 in 1985 to 15,933 in 1994 (see Figure 3.3).
- HUST increased its manpower input in research and university-run enterprise. For instance, equivalent full-time researchers were increased from 955 in 1986 to 1,223 in 1994 (data from the CCP General Office of HUST).
- But HUST *did not* reduce staff size. Rather, its staff *increased* slightly from 5,619 in 1985 to 5,885 in 1994.⁴

Putting these effects together, one may get an impression that HUST tended to *keep* its staff rather than *lay them off* in dealing with its financial difficulty. For solving its financial problem, HUST changed its foci to postgraduate education, research and the university-run enterprise. This strategy gives us a clue about the relationship between HUST and its staff. Like the IMA, HUST was also a family-like colony.

Multi-approaches in personnel management. The second change is that HUST applied different managerial approaches to deal with different work forces. In practice, this meant applying an academic management to the academic system, applying a public service management to the service-oriented units and applying an enterprise management to the profit-oriented units. Thus, the academics still enjoyed a lifetime job guarantee as before. The staff in other systems were hired based on contract. However, this measure was only applied to the staff who were hired after 1990. Thus it was too early to estimate its effect, as only a very small number of non-academic staff was hired after 1990.

The Faculty

Now let us focus on the faculty. HUST adapted a four-rank system for its faculty: full professor, associate professor, lecturer and teaching assistant. The first two are senior ranks, and the last two are junior ranks. "Teachers" refers to those who had been accepted by HUST but did not officially have an academic rank, or temporary teachers like foreign

teachers. The structures of the academics by age and rank in the four selected years are presented in Table 8.2.

Table 8.2 Academics by rank and age in 1985, 1988, 1991, 1994*

year	title	<30	31-35	36-40	41-45	46-50	51-55	56-60	60>	total	%
1985	full prof.					2	20	15	40	77	3
	a. prof.			1	5	121	162	72	25	386	16
	lecturer	1	13	246	277	446	131	26	7	1147	46
	teacher	80	7	4	9	8	4	1		113	5
	t. a.	428	163	117	34	1	1			744	30
	total	509	183	368	325	578	318	114	72	2,467	
	%	21	7	15	13	23	13	5	3		100
1988	full prof.				2	10	54	42	39	147	5
	a. prof.		1		68	174	396	106	3	748	26
	lecturer	108	336	150	399	181	91	15		1,280	45
	teacher	186	47	7	3					243	5
	t. a.	339	76	16	6	2				439	15
	total	633	459	173	476	367	541	163	42	2,857	
	%	22	16	6	17	13	19	6	1		100
1991	full prof.			1	3	12	46	97	49	208	7
	a. prof.	5	10	5	57	186	358	191		812	29
	lecturer	270	233	158	154	204	37	1		1,057	38
	teacher	161	20	9	3					193	7
	t. a.	383	88	31	12	7				521	19
	total	814	341	203	226	409	441	289	49	2,791	
	%	29	12	7	8	15	16	10	2		100
1994	full prof.		7	14	2	44	46	137	76	326	12
	a. prof.	18	65	103	58	249	190	312		995	37
	lecturer	368	281	168	48	49	12	2	1	929	34
	teacher	131	35	30	5	4	1			206	8
	t. a.	115	58	50	15	5				243	9
	total	614	374	351	126	351	249	451	77	2,699	
	%	23	14	13	5	13	9	17	3		100 %

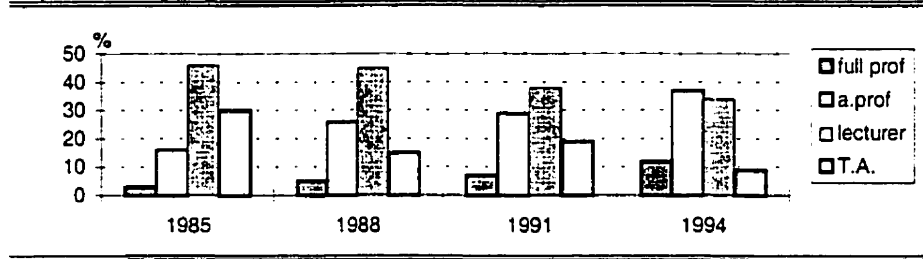
Source: Data from the CCP General Office of HUST.

* T. A. = teaching assistants.

One can see:

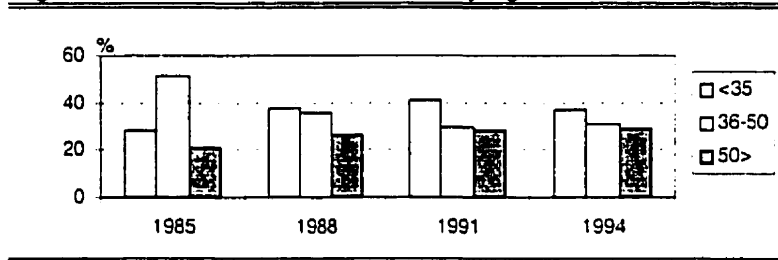
- In general, academic rank was highly associated with age. After turning 40, academics were expected to be promoted to a senior rank.
- Academic structure dramatically changed from 1985 to 1994 (see Figure 8.1).

Figure 8.1 Academics distribution by rank



- If dividing the academics into three age groups, young (35 lower), middle-age (36-50), old (over 50). HUST's academics became younger and older. HUST had a shortage of middle-age academics (see Figure 8.2).

Figure 8.2 Academics distribution by age



The shortage of the middle-age professors had caused some problems. The successor problem in the IMA team was an example. Three factors caused this shortage: 1) during the Cultural Revolution, China did not train academics (see Chapter 3); 2) after the Cultural Revolution, many teachers pursued career in business fields instead of at university. People called this “*business fever*”; and 3) many young and middle age staff studied and stayed abroad. People called this “*go abroad fever*” (see Table 8.4).

Recruitment and Its Influence on the HUST Community

How did HUST recruit its new staff and what were the influences on the HUST community? These are the subjects of this section. Table 8.3 presents the academic personnel changes from 1985 to 1994.

Two channels of recruitment. From Table 8.3, one can see that HUST recruited new professors through two channels: receiving graduates and transferring staff in from other

institutes. The former was the major channel (89.5 percent), the later was the minor (10.5 percent). The two ways were different but had one thing in common. That is, recruitment was a deal between two units, rather than between HUST and individuals.

Receiving graduates followed a five-step procedure:

- A new graduate contacted a unit of HUST that s/he wanted to join.
- If they satisfied each other, the unit would send an application to the university personnel department.
- The personnel department would check the application against three criteria:
 - if the unit had a vacancy,
 - if the candidate met the recruitment criteria, e.g., degree level,
 - if HUST needed to give a job to the candidate's spouse,
- If the candidate met the three criteria, the personnel department would send a letter to the candidate's university asking it to assign the graduate to HUST.
- After the assignment was approved, the graduate was assigned to HUST.

Table 8.3. Changes of HUST academics, 1985-94*

year	recruiting academics**						decreased academics**								
	transferred-in staff			received graduates			transferred-out staff			resigned, left, fired			retired, died		
	sen	jun.	total	post	b	total	sen.	jun	total	sen	jun	total	sen	jun	total
1985	1	24	25	114	60	174	24	123	147	0	1	1	1	4	5
1986	3	23	26	109	94	203	12	90	102	0	1	1	7	15	22
1987	2	10	12	134	61	195	26	42	68	0	1	1	70	24	94
1988	3	18	21	157	73	230	7	18	25	0	4	4	14	2	16
1989	1	6	7	113	98	211	9	40	49	1	10	11	31	6	39
1990	0	3	3	81	11	92	14	16	30	1	0	1	20	5	25
1991	0	3	3	83	15	98	3	19	22	0	6	6	38	9	47
1992	2	17	19	60	21	81	6	46	52	1	10	11	39	5	44
1993	5	28	33	66	25	91	7	46	53	0	7	7	46	1	47
1994	1	24	25	72	27	99	6	27	33	0	7	7	67	1	68
total	18	156	174	989	485	1474	114	467	581	3	47	50	333	74	407
total	1648						1038								

Source: Data from the CCP General Office of HUST.

* The academics who studied abroad are excluded. Of the received graduates, some worked as non-academic staff, e.g., administrators and librarians. But such cases were rare for postgraduate degree owners.

** sen = seniors, jun = juniors, post = postgraduate degree owners, b = bachelor degree owners.⁵

This is *like but not* a labor market behavior. The graduate contacted the unit first. This is like a job hunt in a labor market. But the deal had to be approved by two universities and their top government authorities. This changed a job hunt to a deal between two units, HUST and the graduate's university. In a labor market, a job is a deal between employer and employee. No approval is needed from government or former employers.

The transferring-in also followed a five-step procedure. If HUST needed staff from other institutes, HUST had to send a letter to the transferee's unit to request transferring the staff member to HUST. If the request was accepted, the staff member would be transferred to HUST. If rejected, HUST would not receive this person. This previous request was a *convention*. If HUST recruited staff without a permit from the transferee's unit, or other institutes recruited HUST staff without HUST's permit, this was regarded as a violation of this convention and might and may damage the relationship between two units. An example was given by a university leader:

Two years ago, a neighbor unit recruited our two English teachers without asking our permission. I was very angry. I asked the unit immediately to return the two teachers. In fact we had a very good relationship with the unit. The head of the unit came to me and said that they badly needed English interpreters as the unit was to run a joint venture. I told him: "How could you do things in this way? You know we are so short of English teachers that we could not even offer some English courses." Later, he said he would return me one and keep another. I told him: "No! You must return the two first. Then we may consider giving you one to help." Finally we gave a teacher to the unit.

In this case, one can see:

- The top heads of the two units were involved.
- HUST insisted the unit must first return the two teachers who were recruited unconventionally and then gave one to the unit but in the conventional way.
- The convention was that a job change should be a deal between two units, rather than a deal between the two teachers and the unit.

- The unit accepted this convention. It returned the two, HUST “gave” it one.

This convention was so strong that very few professors were received by other units without HUST’s permission. The “left” in Table 8.3 refers to such cases.

Clearly for both channels, recruitment was a deal was between two units. If free job hunt and free job change are considered as preconditions for a labor market, one can conclude that there was *no* academic labor market existing in China in 1995.

Family as the recruitment unit. It is interesting to note the third criterion of recruitment: “If HUST needed to give a job to the candidate’s spouse.”

This criterion was crucial particularly for the cases when the spouse was not an academic staff. In such cases, this criterion usually became a barrier as HUST had tightly controlled its non-academic staff after 1988. In many cases, although candidates promised that they would not ask HUST to give a job to their spouse, HUST did not accept them. An officer of the Personnel Department commented:

That a staff member did not ask for a job for the spouse does not imply s/he would not ask it later, and also does not mean that HUST would not consider this issue for the staff.

That is, at HUST, *family* was the recruitment unit. In fact, HUST also regulated that if a staff member was transferred out, his/her spouse should be transferred out with him or her. In other words, both work life and family life of the staff were HUST’s concerns. Here one can see that the relationship between HUST and its staff went beyond work and into the family life of staff.

This feature draws a line between the Chinese system and the Western system. In the Western system, employment is for work. In principle, no family life is involved. At HUST, the work life, family life and social life are integrated. This is a significant differ-

ence in human resource management. Therefore words like *employment*, *employer* and *employee* change their meanings in China's context and likely cause misunderstanding if they are used to describe the overall relationships of a unit with its staff in China. Thus, the use of these words will be restricted to describe the work relation in this study.

In short, a family-like relationship began the moment a new staff member entered HUST, and would last the rest of his/her life. It was the most important foundation for HUST's management, and a shared principle by both HUST and its staff. Thus a question must be answered: to what extent are HUST and its staff ready to halt this relationship in predicting the future of the labor market reform in China?⁶

Inbreeding. Another phenomenon relating to recruitment is "inbreeding" which refers to a university's recruiting new staff from its own graduates, recent or past. Inbreeding was very common at China's other universities as well as at HUST.

For instance, an investigation of ten universities in Beijing reported that in 1992 the inbreeding rate for the ten universities was about 48.2 percent, 47.7 percent for the ordinary universities and 56.6 percent for the key universities. The rates at Qinghua University and Beijing University were "even higher" (Zhou Buowen & Chen Yisheng 1994).

The inbreeding rates at HUST for 1993, 1994 and 1995 were 60 percent, 75.4 percent and 62.2 percent respectively. The average rate was 65 percent. The rate varied over units. For instance, for the School of Mechanic Science and Engineering, a faculty established in 1953 and with doctoral programs, the rate was over 80 percent. The rate was about 30-40 percent for new academic units, e.g., the Journalist Department, a new department established in 1983 without any postgraduate program.

Zhen Yanming, based on her nine years' work experience as a personnel officer hypothesized three causes for the high inbreeding rate:

- There was a shortage of university teachers. Universities tended to resolve this problem by keeping their own graduates.
- Graduates were afraid to be undervalued if they worked at a university from which they did not graduate.
- Some universities considered their graduates better than those from others; the key universities considered their graduates better than those from ordinary universities.

But she did not test her hypotheses (Zhen Yenming 1994).

“Inbreeding” was socially important. It implied that the majority of HUST’s academic staff had been educated and worked at HUST and might spend the rest of their life at HUST. HUST became their “home town.” This bound the staff with HUST, and contributed to HUST’s unity. A former senior officer commented:

Comparatively, HUST is very united. I think a major reason is that the majority of its staff were graduated from HUST. They are used to HUST study and work style. Gradually this style became a part of our tradition. This tradition helps HUST to create a relatively stable work and living environment.

That is, “inbreeding” strengthened the unity of HUST although it likely weakened academic exchange through recruitment.

Internal marriage. This was another social consequence of the recruitment. Most new staff were young and single. They would marry someone. Whom did they marry and what were the influences of these internal marriages on management? I observed:

- Many young staff members married each other. The university obviously encouraged these marriages. These couples could enjoy a bigger or better apartment than those who married an outsider.
- Many young staff members married the children of HUST professors. They became relatives. People joked that these staff were “HUST’s son- or daughter-in-law.”

Obviously these marriages made HUST a community of relatives, and contributed to the complications of the interpersonal network on campus.

Interpersonal network. Through recruitment, one can imagine how a complicated interpersonal network could be developed at HUST. Schoolmates, relatives, previous teachers and students, co-workers, all contributed to this network. The longer one stayed at HUST, the more personal connections one had.

This interpersonal network had a strong impact on management. For instance, a headache for HUST administrators was how to make people keep secrets in decision making, particularly on sensitive issues like promotion. The promotion committees made a regulation that all discussions in promotion meetings should not be divulged because such divulgence would create a strong lobbying effect on the committee members if they had a unfavorable opinion of a candidate. However, such divulgence and consequent lobbying were never halted. A department head joked:

If you say we do not have much democracy, I am afraid that I could not agree with you. We do have "democracy" but in a different way. At HUST, nothing can be hidden. There are so many grapevines. A decision made tonight will spread out onto the campus next morning. So, before you open your mouth, you should be careful, consider all possible reactions first and then speak out. If you are thoughtless, people will "train" you. This is a "democracy," isn't it?

Academic Training

Training was important for HUST as the majority of its academics did not receive a post-graduate education. In 1985, only twenty percent of the academics owned a post-graduate degree. This figure increased up to forty eight percent in 1994. Thus, on-the-job training was the primary means for HUST to improve its academics' quality. HUST provided to its academics four regular training programs: foreign language training, teaching skill training, on-the-job degree study and study abroad.

Foreign language training. HUST had offered intensive foreign language training programs since 1978, including English, Japanese, French and German. These programs were offered in summer vacation, usually from early July to the end of August, about ten weeks. Foreign teachers were invited to hold these programs. Participants were selected by either entrance examinations or according to special necessities such as preparing for study abroad. Participants studied as full-time students. Absences were highly restricted. In general, these programs greatly improved the participants' capability in the use of foreign languages in research and teaching.

Teaching skill training. This was for new academics. It had two parts: course study and a period of supervised teaching by a senior teacher after the course study. The purpose of this training was to help new academics gain basic teaching skills. All new staff who had no teaching experience were required to participate in this training. The course study consisted of three or four courses about higher education and university teaching skills. Each course had a final examination. After this study, the Teaching and Research Groups of the young staff would arrange for a senior teacher to advise them on teaching skills until the new staff were promoted as lecturers. Passing the course studies and good teaching performance were two preconditions for promotion from teaching assistant to lecturer. At HUST this was called "pass the teaching test" (*guo jiaoxue guan*).

On-the-job degree study. HUST encouraged its teachers to pursue a postgraduate degree in the school's postgraduate programs. During the study, HUST lightened the participant's academic duties. They could register as part-time students with their full salary. It was attractive for young teachers. Many teachers earned degrees in this way.

Study abroad. This was the fourth type of training. HUST selected some teachers and sent them to study abroad as postgraduate students (two to five years), postdoctoral researchers (one year), or visiting scholars (six to twelve months).⁷ These programs were supported financially by HUST, the Chinese government, international academic societies, and the academics themselves. In general, HUST paid the teachers' international

travel fee and their salary during the study period. The Chinese government paid tuition and living expense for the first year. The receiver institutes or the teachers themselves paid others expenses. Compared with other training programs, study abroad was the most expensive one. An officer of the International Academic Exchange Center estimated that on average, each teacher studying abroad would cost HUST about twenty to thirty thousand yuan. After returning, these teachers usually were promoted to a leading position. According to the President, in 1996, ninety percent of the academic leaders, two thirds of the department/faculty heads and eight of the eleven university leaders had studied abroad (Yang Shuzi 1996).

International intellectual migration. A problem for the study abroad programs was losing the academics. According to Tan Hao, the director of the Center of Chinese Study at Washington, D. C., of more than 250,000 Chinese scholars who studied abroad after 1979, only about 80,000 of them returned to China ("A total ..." 1996, July 26). The return rate was about 31 percent. Table 8.4 and Table 8.5 present the data of HUST.

Table 8.4 Study abroad and return by programs, 1979-94

year	graduate study		junior visiting*		senior visiting*		postdoctoral work		total	
	out	back	out	back	out	back	out	back	out	back
1979	0	0	20	0					20	0
1980	10	0	36	0					46	0
1981	11	0	60	36	2	1			73	36
1982	48	0	35	31	2	2			85	33
1983	60	3	19	57	1	1			80	61
1984	49	1	24	19	7	6			80	26
1985	50	7	52	28	8	6			110	36
1986	45	4	25	39	5	8			75	51
1987	29	5	39	17	7	4			75	26
1988	20	9	28	15	4	7			52	31
1989	15	2	29	15	4	3	2	0	50	20
1990	2	4	26	4	7	7	0	0	35	15
1991	4	2	17	15	4	3	0	1	25	21
1992	6	4	17	10	8	10	0	0	31	24
1993	5	3	28	10	10	6	1	2	44	21
1994	2	0	12	8	18	19	2	0	34	27
total	356	44	467	304	87	83	5	3	915	428
% of return		12		65		95		60		47

Source: Data from Yu Hailin (1995, p. 5).

* visitors with junior or senior academic rank.

Amongst the 915 study-abroad academics, only 428 of them returned to HUST, and 487 of them left. The highest return rate (95 percent) was the senior visiting. It was much higher than the rate (65 percent) of junior visiting. The lowest return rate (12 percent) was for those studying for postgraduate degrees. Only 44 of them returned.

From Table 8.5, one can see that the main destinations of the studying abroad programs were the Great Seven, or G7, countries. HUST sent 772 academics (84 percent) to six of the G7 countries, and 389 of them returned. The return rate was 50 percent.

Table 8.5 Study abroad and return by countries, 1979-94

nation/region	out	back	% of return
USA	368	168	46
Japan	137	76	55
Britain	105	44	42
Canada	82	37	45
Germany	80	47	59
France	50	17	34
Hong Kong	22	4	18
Australia	17	9	53
Russia	10	8	80
Belgium	7	1	14
others	37	17	46
total	915	428	47

Source: Data from Yu Hailin (1995, p. 7).

These low return rates caused two changes to HUST's study-abroad programs. From Table 8.4, one can see that after 1989: 1) HUST sent fewer professors to study abroad; 2) HUST reduced the number studying for postgraduate degrees and increased the number of visiting scholars, particularly the senior visiting scholars.

Clearly, there was a dilemma for HUST. On the one hand, HUST wanted to gain advanced knowledge from the West; on the other hand, HUST was afraid of losing its academics. Thus, HUST needed a new solution for its study-abroad programs.

113 project. “113 project” was the core in all the academic training programs. According to this project, HUST would select ten academics to train as scholars with a national or international reputation, one hundred academics to train as academic echelon successors, and three hundred academics to train as echelon main assistants. Thus the project was called the “113 project.” These selected academics received more support from the university in terms of research funds, opportunities to attend international meetings, study abroad, academic promotions, and better living conditions in order to make them more successful in their academic career (Yang Shuzi 1995, pp. 13-14). In short, the 113 project was a special training project for a few highly selected academics.

We had saw in Chapter 7 that the IMA team had a selecting and training procedure for its team leaders. Here we can see that the 113 project shared the same pattern in preparing its academic leaders. In this view, HUST could be regarded as a huge echelon. As a matter of fact, this was the common pattern for most of China’s organizations, from the Central Committee of Chinese Communist Party to a small enterprise, in the preparation of their leader or successor.⁸ And this pattern had been practiced over thousands of years in China. In other words, this is a historical tradition rather than an innovation. The current practice is just a reproduction of an existed institution. However, one may ask: why has this institution been in place for thousands of years; why is it still alive in today’s China; and will it disappear in the foreseeable future? These are still challenges to the researchers of China’s political culture.

Appraisal: The Work load System and Its Problems

The work load system. HUST practiced an annual academic performance appraisal. The stem of this performance appraisal was a work load system. According to this system, HUST determined the posts and bonuses of the sub-units and individual academics.

Chinese universities practiced a work load system twice in the periods of 1954-56 and 1962-64. But these practices were criticized as “a typical case of copying the Soviet model” and “against the party line and Mao’s thoughts.” In 1964, the Education Ministry

promised that "No work load system will be practiced in future" (CEI 1983, p. 112, 372). However, it was restored in 1981.

The work load system is related to the work relationship between HUST and its staff. When asked why this system had changed three times, a former university leader commented that Mao thought that people were the *masters* of the "new China"; they worked for themselves. People should not be *forced* to work; thus, a work load system was improper for Mao. In contrast, *trust* and *praise* should be two ways in motivating people to work. Unfortunately, Mao's idea was "unrealistic and impractical."

Table 8.6 HUST's work load system

duty	item	measure	weight points
<i>Teaching</i>	teaching	teaching	0.4-0.45/class hour for undergraduates 0.45-0.5/class hour for master's students 0.5-0.55/class hour for doctoral students
	teaching publish	textbook	4/10,000 characters
		teaching materials	2/10,000 characters
		paper on national journals	6/paper * iq #
		paper on provincial journals or conferences	3/paper * iq
	lab building	work time	2/week
<i>Research</i>	vertical projects	fund**	40, 60, 80, 160/10,000 yuan * iq
	lateral projects	fund**	40, 60, 80, 160/10,000 yuan * iq
<i>Publish</i>	book	written	5/10,000 characters
		translated	3/10,000 characters
		edited	4/10,000 characters
	paper	cited by EI, ISR, SCI, ISTR ***	10/paper * iq
		international or national journal and conference	6/paper * iq
		provincial journal or meeting	3/paper * iq
<i>Production</i>	products	research & development	2/week
		submitted profit	40/10,000 yuan * iq
<i>Admin. as part-time duty</i>		heads of department	30-50
		heads of TRG	25-35
		others	10-20
<i>Other services</i>		work time	2/week

Source: From the Personnel Department of HUST. This was a simplified summary based upon the original documents.

#: iq: individual's quota for each team member if it was a team work.

** : 40, 60, 80, 160 points are for projects in engineering, science, management and social science, and humanities disciplines respectively.

*** EI: Engineering Index, ISR: Index of Science Review, SCI: Science Citation Index, ISTR, Index of Science and Technology Review.

In 1981, the Education Ministry designed a national unified work load system which it applied to its universities, then to all universities (EM 1981). In 1986, the SEC, successor to the Education Ministry allowed universities to design their own work load system, but it had to conform to the Education Ministry system. Thus HUST designed its work load system, which I summarize in Table 8.6.

The expected work load points for full professors, associate professors, lecturers and teaching assistants were 120, 110, 100 and 80 respectively. For instance, a lecturer had to give lectures of 220-250 class hours if s/he did only teaching. An academic year at HUST had forty weeks. So, on average, a teaching-only lecturer needed to give five hours of lectures per week to fulfill his or her work load. If teaching duty was not enough to fulfill the work load, the teacher had to do something else like research.

If a staff member failed to fulfill the work load in three years, s/he would not be qualified as a candidate for promotion and might be suspended from duty (*jiepin*). During the suspension period, the staff member received only a basic salary without performance bonus (See Table 8.12). But s/he could use this period of time for self-improvement, or to change a job. But the person *would not be laid off*. That is, HUST still kept the staff member but gave the person time and opportunities for improvement and change. This was the distinct difference between suspension (*jiepin*) and lay off and fire (*jiegu*). The former implies that the staff member was still *in* HUST; the latter means that the person was *out* of HUST.

This system was also used to appraise the performance of each unit. If the actual work load of a unit was over the expected work load, the unit would allow to recruit new members or gave an overwork bonus. If a unit was under the expected work load, it had to do something to fill its work load, and it could not recruit new members.

For instance, the IMA team had only 300 points of teaching load, and its full work load was about 2,000 points. So, the IMA needed to conduct research of 425,000 yuan.

The research funds received by the IMA in 1995 were 1,550,000 yuan. Thus the IMA could either recruit new members or give an overwork bonus, or both.

Clearly this work load system affects individuals as well as sub-units and made the leadership at the TRG level crucial. There were two extremes. Some TRGs asked its members to carry the work load by themselves. That is, teachers took responsibility to fill their workloads. They could not expect the TRG to do anything for them on this. This type of leadership could be called *individual-responsibility-based leadership*. A problem under this type of leadership was that the teachers felt they lacked a sense of achievement. This was one extreme. Another extreme was the leadership of the IMA team. It took the full responsibility for the work load for all members. This type of leadership could be called *unit-responsibility-based leadership*. The TRGs under this type of leadership were usually more successful. This kind of leadership needed a long-term mutual commitment from both the leaders and members, thus it was difficult to be achieved. In practice, the leadership in most units was somewhere in between. They asked teachers to take responsibility, but offered help when it was needed.

A major critics of this work load system was that it did not regulate a required teaching load. Instead, it allowed academics to make choices between teaching and other academic duties. As research was an easy way to fulfill the work load, teachers preferred to do research, rather than take teaching duty. Thus assignment of teaching tasks became a problem in some TRGs. A head of the Teaching Affair Department told a story which occurred in a TRG at the Department of Computer Science:

In 1990, this group had seventy one staff members, fifty-three teachers and eighteen supporters. In 1992, only fifty of them, forty-five teachers and five supports remained. However, among the remaining forty-five teachers, fifteen teachers did not take any teaching duty as they ran three companies. These fifteen teachers were the most capable people. Among them, five were full and associate professors. They published six books and had research funds of 4 million yuan in the period of the Eight Five-Year Plan (1991-1995). The average amount of research

funding per person was 60,000 yuan. That means these teachers already had filled a work load of two years. As they filled the work load well and had research achievements, they were promoted faster. The other teachers felt that it was unfair. They had to teach fifty more courses. This was not an easy task. And so, they also tried to run companies, instead of teaching. The head of the group complained to me that: "In such a situation, what can I do with these teachers? Ask them to put more effort on teaching improvement? It is completely impossible. I foresee this situation will be worse if the university does not change this system." According to the head, this system almost destroyed his group.

However, HUST did not change this system. Instead, it gave teachers a bonus to encourage them to take more teaching duty, about fifteen yuan per class hour in 1994. A teacher could get 3,300 yuan for 220 teaching hours. This policy basically solved the problem of teaching-duty assignment, but the university took an extra financial burden.

Promotion

Academic promotion is a recognition of an individual's academic achievement and also an incentive to improve individual performance. This section presents a case study of the 1995 academic promotion at HUST in terms of its promotion system, work procedure and practices. One will see how the concerns of the living side influenced the work side in academic promotion.

Academic Promotion in China

As mentioned above, China had a unified four-rank academic system: full professor, associate professor, lecturer, and teaching assistant. This system was created by the Nationalist government before 1949.⁹ At that time, the central government held the authority. Universities recommended candidates to the central government for approval. After 1949, the communist government kept this system. But the authority locations changed several times. These changes are summarized in Table 8.7 with the case of HUST. One can see that it was a decentralized process from the Education Ministry to the

university. But, for most ordinary universities, their top government agency held the authority for senior promotion.

Despite HUST holding the authority on senior promotions, the SEC decided the academic rank structure for all its universities. For instance, I was told that the maximum percentage of the senior staff was 60 percent for Beijing University and Qinghua University, for key universities like HUST was 45-50 percent, for ordinary universities it was 35-40 percent, and for three-year institutes it was 20-35 percent. But I failed to find the official document to confirm it.

Table 8.7 Promotion authority locations in the case of HUST, 1949-95

Period	academic promotion	authority location
1953-1960	senior ranks	the Education Ministry
	junior ranks	the Education Ministry
1960-1965	senior ranks	the provincial authority
	junior ranks	the university academic committee
1966-1977	no academic promotion	
1978-1985*	senior ranks	the university academic committee, or the provincial authority
	junior ranks	the university academic committee
1986-1995	senior ranks & junior ranks	the university academic committee

Source: Data from CEYE (1984, pp. 364-367); GB (1988, pp. 451-467)

* Before 1985, HUST had authority for senior promotion in some disciplines, but after 1986, HUST had a full authority on all disciplines.¹⁰

As the maximum of senior positions for HUST was 50 percent and the percentage of the senior academics at HUST had reached 48.5 percent, the senior promotion had relied heavily upon the vacancies from recent retirement and became competitive and sensitive. If young academics had less chance to be promoted, they might leave (Liu Xin 1995). This would harm HUST's future. This was the situation in 1995.

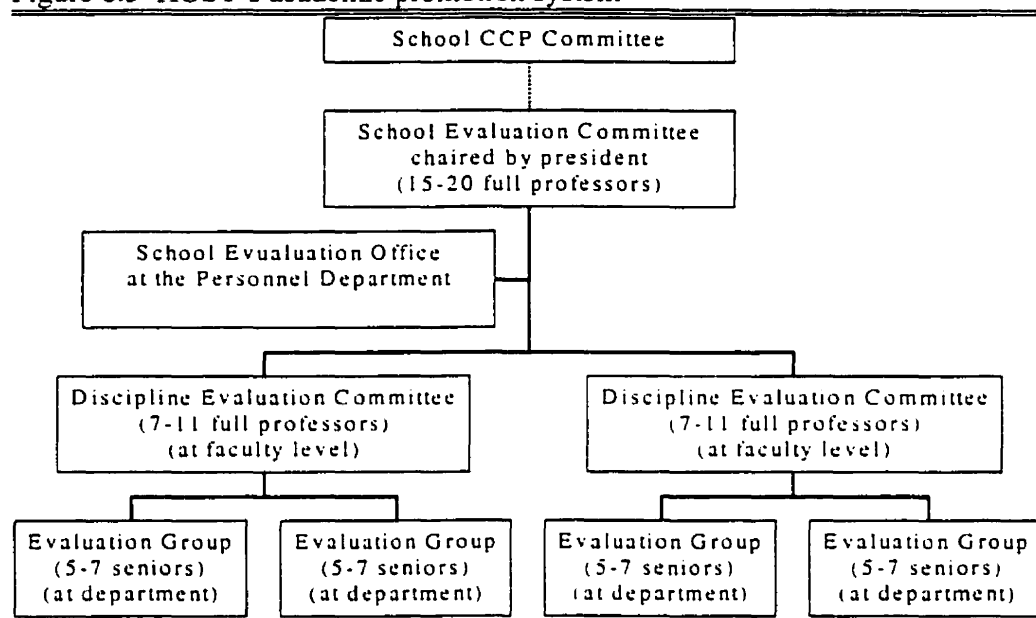
Academic Promotion at HUST

As academic promotion is an annual routine, HUST established a specific system for this work. Figure 8.3 presents this system in 1995.

The University CCP Committee supervised this system. It selected the University Evaluation Committee members and decided the promotion quota for all units. The uni-

versity committee was an executive body in charge of approving recommendations from the discipline evaluation committees. The university committee had a specific office for paper work.

Figure 8.3 HUST's academic promotion system



Source: Data from HUST (1995e).

The discipline committees were in charge of recommending candidates for promotion in specific fields. A discipline committee might have several sub-evaluation groups to help it to evaluate the candidates in sub-disciplines. The discipline committees and their groups were consulting bodies; their decisions needed to be approved by the university committee. But in practice, the university committee rarely dismissed the recommendations from the discipline committees.

One can see two features of this system: 1) the university party committee was the supervisory body, the university committee was the executive body, and discipline committees were advisory bodies; and 2) all committee members were seniors, and full professors played key roles.

The promotion process had four steps:

- The university party committee determined the promotion quotas for each unit.

- The university organized the candidate qualification examination.
- The discipline committees recommended the candidates for promotion.
- The university committee made the final decision on promotion and reevaluated the cases of appeals.

The first step was crucial as it determined how many people could be promoted in each unit in the year. This step actually became a part of the university personnel planning. A former vice president described the general procedure of the quota determination:

First, the Personnel Department conducts an investigation in all departments to know for each rank how many candidates they may have and to collect the heads' opinions on the department development plan and promotion plan. The vice president in charge of personnel affairs leads the investigation. Then, the vice president presents a proposal which includes the total quota and quota distribution and sends it to the university party committee for discussion. According to the university development plan and the SEC regulations on academic promotion, the party committee makes a final decision on the total quota and quota distribution. Then these quotas will be announced publicly.

One may note that:

- The university party committee held the authority in determining promotion quotas and used it as a tool of planning.
- The university had already reached an agreement with departments on their quotas before it made the final decision on quota distribution. This step gave an opportunity to all departments to participate in decisions and ensured that all departments supported the final decision. This was termed "democracy in decision making" (*juece minzhu*). This was a typical decision-making pattern at HUST. In this way, the heads of the university and departments knew almost exactly who would be promoted in that year and why.

The second step was the candidate qualification examination. There were four criteria:

- Candidates must follow the party line and have no record of violation of academic morality like plagiarizing or doing “black” work. The general party branch was in charge this work (see Chapter 11).
- Candidates must have fulfilled their work load in the past three years.
- Junior candidates should pass a teaching test, and senior candidates should pass a foreign language examination specially designed for promotion.
- Candidates should meet certain criteria on academic achievements like awards for teaching or research, raising research funds, publication, or a generating profit. The evidence would be exhibited publicly for three days in the department to let all people know what the candidates did and to determine if they were qualified. This was termed “mass supervision.”

Only qualified candidates could apply for promotion recommendation. It should be noted that although the political and moral requirements came first, in practice academic achievement was the most crucial.

The third step was each discipline committee selecting some candidates for recommendation according to the given quota. The committee selected candidates by voting. I observed two voting meetings in the field, one for associate professor and one for lecturer promotion.

On voting day, the discipline committee held a voting meeting. First, the applicants presented to the committee their work history and performance. During the presentation, committee members made notes and asked questions on unclear information. Then applicants were asked to leave the meeting room. The committee members checked the factual information of each candidate. They asked the secretaries to search out very detailed information from candidates' files like number of published papers/books, levels of academic journals, exact amount of research funds, or award levels. When all of them had

no further questions about the factual information, they compared who should be recommended.

After a full discussion, they took the first vote. The votes had to equal the given quota. Secretaries immediately counted the votes and reported the result. As a rule, only the applicants who won two thirds of the total votes would be recommended. If the successful applicants had less than the given quota, the committee had to vote again until the successful applicants exactly equaled the given quota. In the two meetings I observed, the committee voted twice. Then the committee announced the result immediately and sent it to the university committee for approval.

The final step was that the university committee approved the discipline committee's recommendation. Any applicant who failed to be recommended had the right to appeal if s/he felt that the discipline committee made unfair recommendations. But s/he had to clearly point out that compared with a specific candidate, s/he was more able, and give reasons for this judgement. Then the university committee would re-evaluate both cases. In general such appeals were rarely successful as any change meant making another loser. The fairest solution was that the university committee would disallow both cases if it was unable to find significant differences between the two competitors. However, I did observe a successful appeal in the associate professor promotion. The reasons from the university committee for this change were:

As to the winner, she had longer work experience and would have no opportunity for promotion as she would retire in 1996. In addition, her husband, a teacher at HUST, had died recently. This had caused her health problems. Besides, the family ran into financial difficulty after her husband died, as her earnings were not enough to support her family.

As to the loser, she was young and had more chances for promotion. The university committee suggested the discipline committee give her a "special consideration" in

the next-year promotion as she “agreed to withdraw” her application. This was “a very friendly attitude.”

This was a rare case. But it clearly showed how non-academic factors influenced academic decisions. From what I knew, the university party committee was involved in the final decision. This case as well as recruitment showed *how concerns from the living side influenced the decision-making of the work side*.

It is also interesting to note that the final solution was that the loser “agreed to withdraw” her application. Likely someone had urged her to do so, which released the university committee from a dilemma. Thus the university committee suggested that she would be given special consideration next year because of her “friendly attitude.” This factor is neither academic, nor economic, but belongs to general morality.

Professional Rank System for Administrators

HUST had a special professional rank system for administrators as well, named “professional rank serial for higher education management and research” (*gaoteng jiaoyu guanli yanjiu xilie*), shortened to “management research serial” (MRS). MRS had three ranks: full researcher, associate researcher, assistant researcher, equivalent to full professor, associate professor and lecturer respectively.

MRS is different from the hierarchy system. The latter refers to administrative position and duty, and MRS was a recognition of personal management achievement. Promotions within this system did not need academic achievements, i.e. publishing or teaching. The major criterion for promotion was management achievement, e.g., management improvement and innovations. The announced purpose of MRS was to encourage administrators to pay more attention to managerial skill improvement, provide better services and eventually to improve the management quality of HUST. But the practical purpose was to keep administrators in their positions. A senior administrator argued:

At HUST, most professionals have a specific professional title. This title goes with individuals no matter what happens to them. A professor is a professor although he may have been retired for years. Titles such as “professor,” “doctor” or “chartered accountant” indicate the owner’s expertise and capability, rather than his position and duty. This is a recognition of a person’s achievements.

Besides, in China, you know, salary, housing and other benefits are associated with these titles. But only one group of professional in the university have no special titles. They are administrators. It is true that their salary and other benefits increase along with their promotion. However, if they need to be removed from their positions, should we change their salary and other benefits? If their salary and benefits should be reduced accordingly, who would want to be administrators? No one! If most administrators in a university are lower quality people, how should we expect the university to run well despite having high quality academics? As a matter of fact, in most Chinese universities, few capable people want to take administration as their career. This is a reason why universities have poor quality administration. We should change it. An important measure is to give administrators a professional title, to recognize their achievement and let administrators feel safe in their career path. In this way, we can attract more capable people to join the administration and to improve our administrative quality.

This argument made two justifications for MRS, one from professional recognition and the other from economic concerns, e.g., salary and benefits. But the underlying assumption of the two justifications is *equality*. That is, all professionals should be treated equally. Thus, management as professionals should have the same privileges as other professionals. Otherwise, university management will suffer the lack of attraction for capable people.

HUST practiced MRS from 1987. In 1987, twenty-two administrators were given the title of “associate researcher.” In 1992, four administrators were given the title of “full researcher.” Since then, each year, some administrators were given MRS titles.

It was too early to make a judgement on this brand new practice. But some academics at HUST disliked MRS. A professor commented "our professional rank system has changed its flavor. It has no credit at all. Everyone is able to say: "I am a professor," "I am a researcher." although s/he neither teaches nor does research. I foresee that this system will run into bankruptcy someday. Then we have to re-build it." The MRS does confuse the international academics in international academic exchanges as there are no such titles in the world except in China. After visiting HUST, a Japanese scholar complained that some "researchers" he worked with were actually not academics (Hika Yuten 1994).

Earnings

Academic monetary earnings in China is another subject that has attracted much attention but it was hard to find a study which provided systematic and reliable data. A widely accepted view is that the earnings of university teachers are too low to keep them in their positions (Guo Fei 1993; The World Bank 1997, pp. 49-51). I will examine this issue with the data of HUST.

Earnings: White, Gray and Black

HUST professors had three kinds of earnings, informally termed, "white," "gray," and "black." White earnings were these listed on individual's salary sheets, including basic salary, performance bonus (*yejijingtie*) and subsidies (*butie*). Gray earnings were these which appeared in the university accounting books but not on individual salary sheets. Gray earnings were work bonuses like teaching bonus and research bonus. Gray earnings were secret for individuals but the university had records of them. Black earnings were these directly paid to individuals from external sources like external consulting earnings. Even the university had no record of "black" earnings.

Sources of the three kinds of earnings were different. White earnings were mainly from the SEC budget and distributed according to a national unified salary system. Gray

earnings were mainly from the university's self-generated incomes and distributed according to the university's bonus regulations, i.e. 10-12 percent of research funds, or 15 yuan per class hour. Black earnings were from external sources. Governments and the university could not control these earnings.

Before 1976, China applied only a unified salary policy and dismissed bonuses. So, "white" earning was the only income.¹¹ Since the 1980s, bonuses were allowed to be used as incentives for performance improvement. Then bonuses became a major component of earnings. As well, many teachers provided services to external units. Payment for such services went into individual earnings. Before the 1980s, payments for external services were paid to the university. It was illegal for such a payment to be paid to individuals. Then the situation changed. Many external units paid fees directly to individuals who might not disclose such earnings to the university. Thus, such service was called "black work", and the earnings from black work were called "black earnings." As black earnings went directly to individuals, rather than through the university accounting department, the university only knew that its academics made considerable black earnings, but had no idea how much.

There remained a debate about whether individuals should submit black earnings to the university. Some argued that teachers should keep these earnings as they gave the services in their spare time. However, a weakness of this argument was that it was difficult to draw a line between work time and spare time due to the nature of academic work. In contrast, some argued that black earnings should be submitted as teachers were the workers of the university. The underlying assumption was that the university is a collective of all workers, thus all earnings made by the workers should go to the university.

HUST decreed that such earnings should be submitted to the university because of loyalty. Then the university would reward individuals according to its work bonus policies. Thus, at HUST, black earning was *illegal*. Making black earning was regarded as *immoral*. Prof. Duan's response to my question about "black work" was an example (see

Chapter 7). But, from what I knew, some academics made considerable black earnings. In some cases, the black earnings were even higher than the sum of other earnings. However, as black earnings were unverifiable, I exclude the black earnings and only focus on the white and gray earnings in the following analysis.

The National Unified Salary System and Its Changes

China established its national unified academic salary system in 1952. Since then, this system was changed three times, in 1956, 1985, 1993 respectively. Before 1949, Chinese universities had no unified salary system. In 1949, after it took over China, the CCP government allowed all universities to keep their own salary system. In 1952, the government applied its first unified salary system. It was called: salary-point (*gongzifen*) system. Table 8.8 presents this system.

Table 8.8 The 1952 salary-point system										unit: salary point/month
grade	1	2	3	4	5	6	7	8	9	10
professor	880	820	760	700	650	600	550	500	450	440
lecturer	500	440	425	375	350	325	305	285	265	245
teaching assistant	285	265	245	225	210	185	180	165		
worker*	150	130	120	110	100					

Source: Data from EBHP (1956, p. 84)

* Worker refers to physical workers. I list their earnings as a reference.

In this system, the unit of salary was a *salary point*, rather than the currency unit, *yuan*. Actual salary was calculated as salary points multiples the local salary index. The local salary index was determined by the local consumer goods price index. The local consumer goods price index changed every month. For instance, if a professor's salary point was 625 and the local salary index in May of 1952 in Wuhan was 0.24 yuan per point,¹² the professor's salary would be 150 yuan [625 points * 0.24 yuan/point = 150 yuan]. This system used the salary point as the salary unit due to the rapidly changing consumer goods prices in the early 1950s.

Despite this system having ten levels, the Education Ministry fixed the average salary points for all ranks of academics: 625 for professors, full and associate, 365 for

lecturers, 217.5 for teaching assistants and 120 for workers. That is, the actual range of average salary points was from 625 to 120, rather than from 880 to 100. The salary gap between professors and workers was about 5.2 to 1 (EBHP 1956, p. 81)

In 1956, the situation was under control, and the government was to carry out its plan of modernization. A new salary system was applied. Mainland China was divided into eleven economic regions according to their local consumer price index. Wuhan was at the fourth Region. Table 8.9 presents the 1956 salary system for the fourth region.

Table 8.9 The 1956 salary system (4th region) unit: yuan/month

Grade	1	2	3	4	5	6
full professor	327	272.5	229	196	168	141.5
associate professor	229	196	168	141.5		
lecturer	141.5	120	100.5	85		
teaching assistant	85	74	65.5	59		
worker	31	28.5	26	24	22	

Source: Data from EBHP (1963, vol. 1, p. 123)

In this salary system, the currency unit "yuan" replaced the "salary point" as the basic unit. According to this system, the highest salary (327 yuan) was about fifteen times higher than the lowest (22 yuan). The gap became wider than the 1952 salary system in which the gap was 8.8. But in the case of HUST, the actual average salary gap was only about 5.54:1 (191.38:34.55), but slightly wider than the 5.2:1 in the 1952 system. Table 8.10 reports the salary changes from the 1952 system to the 1956 system at HUST.

Table 8.10. Salary changes at HUST, 1956 unit: yuan/month

	professors	lecturers	t. assistants	workers
before	156.8	79.55	51.16	28.92
after	191.38	103.23	64.01	34.55
increase (%)	22.05	29.7	20.1	18.1

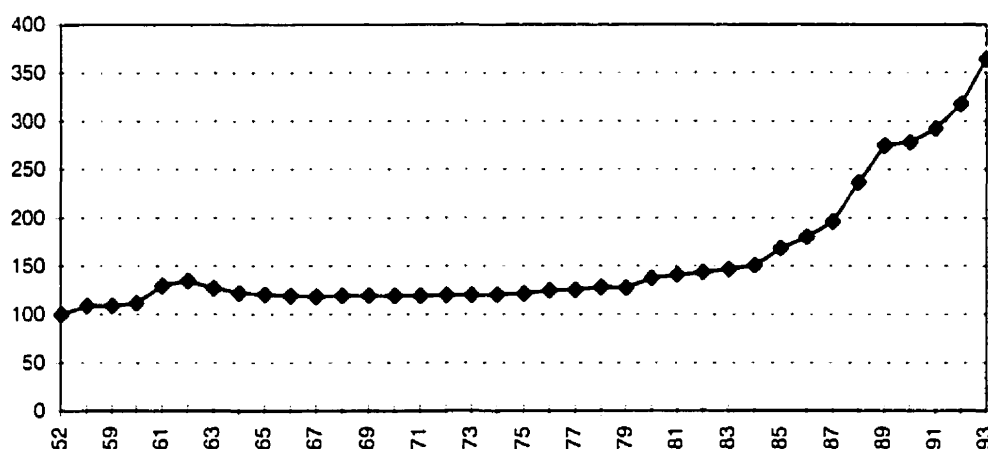
Source: Data from HUST (1956).

This system lasted nineteen years, from 1956 to 1985. During this period, the government froze both salary and consumer goods prices, which was called "the low-salary and low-price policy." Under this policy, the salary was not a payment for work, but an

amount of money for living. This situation was broken by two factors after China launched its market reform in the 1980s.

One was the high inflation rate after 1978, particularly on living goods or household goods. Figure 8.4 presents the changes of the consumer price index of living goods (*zhigong shenghuo feiyong jiage zhishu*) from 1958 to 1993. One can see that after 1978 the prices of living goods started to climb. After 1985, the prices rose rapidly. After a short stop in 1989 and 1990, the prices rose again. To 1993, the living goods prices index had tripled (364 percent). This was a primary reason for the 1985 and 1993 salary changes.

Figure 8.4 Consumer price index for living goods, 1952-93 (1952=100%)



Source: Data from SSBC (1991 - 1994).

The other reason was that the government *used salary as an incentive* to improve teachers' performance. In this sense, both the 1985 and 1993 salary system were *reforms* of the 1956 salary system, not just an increase in teachers' salary. Now let us see how the government used salary as a tool to stimulate teachers, and how teachers responded to the government stimulation.

The major change of the 1985 salary system was giving a performance bonus to individuals according to their performance. The salary in this system had four parts:

- basic salary, forty yuan, the same for everyone
- rank salary, according to academic ranks
- work experience salary, one yuan per year
- performance bonus, the maximum amount equivalent to two months salary

Table 8.11 presents the sums of basic and rank salaries in the 1985 salary system. The major components of the 1985 system were academic rank and work years. The individual performance bonus was restricted to a sum of two-month basic and rank salary. This was criticized as *egalitarianism*. Thus, the 1993 salary system was designed to replace the 1985 system.

Table 8.11 The 1985 salary system (rank salary and basic salary) unit: yuan/month

rank	1	2	3	4	5	6	7	8	9	10	basic
full professor	315	290	215	190	165	150	140	130	120		40
associate professor	190	165	150	140	130	120	110	100	91	82	40
lecturer	110	100	91	82	73	65	57				40
t. assistant	57	49	42	36	30						40
worker	49	42	36	30	24	18	12	6			40

Source: Data from the documents of the 1985 salary change in the HUST Achieve

The basic idea of the 1993 system was to enlarge the performance bonus from two to four months' salary, or thirty percent of the total salary. It split total salary into basic salary (70 percent) and performance bonus (30 percent). To ensure "overcoming the tendency of equalitarianism," the document of the 1993 system regulated that the performance bonus of all members in a unit should be pooled together and then re-distributed to everyone according to individual performance. It would be unacceptable if the performance bonus was equally distributed. In short, the designers of the 1993 system tried to widen the salary gap from seventeen percent (two-month salary) to thirty percent. Table 8.12 presents the 1993 salary system.

However, in practice, the acceptable salary gap seemed much less than thirty percent. People tended to keep the salary gap at certain degree. Table 8.13 presents a summary of salaries of all fifty seven teacher in a department at HUST in 1995.

Table 8.12: The 1993 salary system

unit: yuan/month

grade	basic salary (70%)										performance bonus (30%)
	1	2	3	4	5	6	7	8	9	10	
full professor	390	430	470	520	570	620	670				71-287
associate prof	275	305	335	365	395	435	475	515	555		
lecturer	205	225	245	265	285	315	345	375	405	435	
t. assistant	165	179	193	213	233	253					
worker	135-314										58-135

Source: Data from GBHPG (1993, p. 35, p. 52).

Table 8.13: Average salary of the 57 teachers, 1995

unit: yuan/month

	mean and range of two parts of salary					total (average)
	basic salary (70%)		performance bonus (30%)			
	mean	range	mean	range	difference	
full professor (9)	439	390-470	199	144-251	107	638
associate prof (15)	307	275-365	137	105-174	69	444
lecturer (26)	227	213-265	99	86-135	50	326
teaching assis. (7)	189	179-213	85	77-107	30	274

Source: Data from the salary sheet of the department.

The case shows that:

- Salary for seniors was graded from 1 to 3, for juniors from 2 to 4.
- On average, the performance bonus only made a difference of 11-17 percent in total salary. That is, the acceptable difference in total salary was 11-17 percent, rather than 30 percent as the designer of the 1993 system expected.
- Comparing the average salary gaps in 1956 and 1995 at HUST, the salary gap between professors and teaching assistants narrowed from 2.98:1 to 2.02:1 and the salary gap between professors and lecturer also narrowed from 1.85:1 to 1.70:1 (see Table 8.10 and Table 8.13). This clearly shows egalitarianism alive among the people.

As a matter of fact, not only did people narrow their salary gap, the government did the same. Table 8.14 presents a summary of the salary gaps in the four salary systems.

Table 8.14 The salary gap in the four national salary systems

salary system	the highest	the lowest	salary gap
1952	880	100	8.8
1956	327	22	14.9
1985	355 (315+40)	46 (6+40)	7.7
1993	975 (670+287)	193 (135+58)	5.1

The 1956 system set the widest salary gap, and the 1993 system set the narrowest one. That is, the government actually set the narrowest salary gap in 1993 although it asked people to widen the salary difference at the same time. It can be seen as equalitarianism from the government.

The above clearly confirmed that in 1995, *equalitarianism with a "reasonable" difference* was still a widely accepted principle by both people and the government in earning distribution. The 1985 and 1993 salary reforms did not make significant changes in this.

It should be pointed out that equalitarianism in wealth distribution came from Chinese tradition, rather than from the Chinese Communist Party revolution. An ancient Chinese saying was that "people are not disturbed by being poor, but by unequal distribution [of wealth] (*men bu huan gua er huan bujun*).” The party won its victory with popular support because the party promised that it would distribute social wealth more equally. In this view, the party obtained its power from this tradition. What if the party breaks its promise? This is a tough challenge for the Chinese Communist Party.

In short, in examining the changes in the Chinese salary system, one can see that the Chinese tradition of equalitarianism was still widely accepted and practiced. This tradition can be expressed as: social wealth should be distributed equally to individuals with a reasonable difference. In general, the more equal, the better. Many Chinese considered that the individual wealth difference had become too large to be acceptable. The current differences in individuals' wealth had caused serious social tensions in China (Jiang Zemin 1995) although the differences, some scholars argued, were not significant in comparison with those in other countries (Li Ding 1995)

Bonuses and Subsidies

The second major component of earnings was bonuses. HUST gave academics a monthly rank bonus (*zhiwu jingtie*): 55 yuan for full professors, 46 yuan for associate professors, 38 yuan for lecturers and 25-30 yuan for teaching assistants. As well, HUST gave various work bonuses. The two major bonuses for academics were the teaching bonus and the research bonus. A teaching bonus was about fifteen yuan per class hour. A teacher who did 220 class hours of teaching could get a 3,300 yuan teaching bonus. A research bonus was ten to twelve percent of the research funds. Each member of the IMA team could get a research bonus of 7,500 yuan on average. Obviously the work bonus varied from one another. But HUST had a record of average bonuses for all staff which is presented in Table 8.15.

Table 8.15 Average work bonus at HUST, 1983-94 unit: yuan/year

year	bonus	year	bonus	year	bonus	year	bonus
1983	133	1986	564	1989	880	1992	2292
1984	279	1987	643	1990	1228	1993	2770
1985	388	1988	799	1991	1310	1994	2720

Source: Data from the CCP General Office of HUST.

Work bonuses had increased twenty times from 133 yuan in 1983 to 2,720 yuan in 1994. The 1994 average work bonus was equivalent to four months' salary for full professors, or ten months' salary for teaching assistants (see Table 8.13) It should be noted that not all universities could give such a high work bonus to their staff because the sources of work bonus were mainly from the self-generated income like the research fund. In fact, HUST was at the top among the universities and colleges in Wuhan,.

The third component of earnings was subsidies. Since 1979, the central government, provincial government and city government asked HUST to give its staff subsidies for various reasons like cost of living increase, one-family-one-child policy and so on. But in most cases, the governments did not give an extra budget to universities for their policies. Thus, people joked that these policies were "asking-without-pay" policies. Table 8.16 lists all subsidy policies and the payment from 1979 to 1992 in the case of HUST.

When the governments asked universities to take on subsidy payments, the financial burdens were transferred from the governments' shoulder to the university's. As a result, a university might pay these subsidies if it had money. Otherwise, its staff would not benefit from these policies. These financial burdens were so heavy that even HUST could not fully afford them. For instance, according to a policy from the city government in October 1992, work units were to give their staff a work lunch subsidy, three yuan per workday, or about sixty-six yuan per month. HUST could only afford forty yuan per month. From what I know, many universities in Wuhan could not afford it. Until 1993, the accumulated subsidies were up to about 150 yuan per month. So, the 1993 salary change absorbed sixty-four yuan of it and left the rest (about eighty-six yuan per month) for the subsidies.

Table 8.16: Government subsidy policies and payment, 1979-92 unit: yuan

date	subsidy policy	who asked	who paid	yuan/month	total*
1979/10	one-family-one-child	city	HUST	4	31.8
1980	food price rising	state	SEC	2	86.3
1981/1	buying newspaper/books	province	HUST	7.7	684.9
1984	winter heating	province	HUST	15/year	111.2
1984/3	water/electricity price rising	province	HUST	1.5	133.4
1986/1	food price rising	province	HUST	6	539.6
1986	female staff health care	province	HUST	2	106.0
1986	over work load bonus	state	HUST	1 per hour	1,575.2
1988/5	food price rising	state	SEC	10	1,196.9
1990/1	gas price rising	city	HUST	5	444.7
1991/4	food price rising	province	HUST	0.8	81.6
1991/5	food price rising	state	SEC	6	533.7
1991/7	personal hygiene	province	HUST	6	533.7
1991/7	retired staff living subsidy	province	HUST	15	213.7
1991	hot weather	city	HUST	70 per year	578.1
1992/1	rent rising	city	HUST	7% of salary	710.5
1992/2	work time	state	SEC	1 per year	1,798.5
1992/3	performance bonus	province	HUST	aver. 56.57	4,212.2
1992/3	retired staff living subsidy	state	HUST	17	246.2
1992/4	retired staff living subsidy	province	HUST	31	453.6
1992/4	food price rising	state	SEC	5	915.1
1992/5	food price rising	city	HUST	5	916.5
1992/9	transportation price rising	city	HUST	6	1,095.3
1992/10	work lunch	city	HUST	40	8,004.9
Total:					25,203.6

in which, SEC paid 4,530,500 yuan (18%), HUST paid 20,673,100 yuan (82%).

Source: Field notes.

* The unit in this column was 1,000 yuan per year.

A Comparison of Family Incomes in 1995

Now we can estimate the total white and gray earnings at HUST in 1995. They were: salary, rank bonus, work bonus and subsidies. With the data of the fifty-seven teachers, Table 8.17 presents their total monthly and annual earnings.

Table 8.17 An estimation of white and gray earnings of HUST academics 1995 unit: yuan

	salary	%	r. bonus*	%	w. bonus*	%	subsidies**	%	total/month	total/year
full professor	638	63	55	5	227	23	86.5	9	1006	12072
associate prof	444	55	46	6	227	28	86.5	11	803	9636
lecturer	326	48	38	6	227	34	86.5	13	677	8124
t. assistant	274	45	27	4	227	37	86.5	14	614	7368

* r. bonus = rank bonus, w. bonus = work bonus. I used the 1994 average work bonus here as the 1995 data was unavailable.

** Data from the salary sheet from the department.

We can compare this estimation with the 1995 average family income and average income per capita (AIPC) in China's urban area.¹³

Table 8.18 Family income and AIPC of HUST academics, 1995*

	family income	AIPC
National	12,847	3,893
Hubei (HUST location)	11,897	3,605
Guangdong (the highest)	22,605	6,850
Inner Mongolia (the lowest)	8,537	2,587
HUST		
full professor	24,144	7,316
associate professor	19,272	5,840
lecturer	18,248	5,530
teaching assistant	14,736	4,465

* The unit is: yuan/year

According to the annual report of the State Bureau of Statistics of China in 1995, the national AIPC was 3,895 yuan. The AIPC in Guangdong was the highest (6,850 yuan), in Hubei it was 3,605 yuan and in Inner Mongolia was the lowest (2,587 yuan) ("Average Income..." *Huasheng News* 1996, March, 15). The average family size in the urban area in 1993 was 3.3 (*1996 Britannica Book of the Year*, Chicago: Encyclopaedia Britannica 1996, p. 585). If assuming each teacher family had two same-rank teachers, the family income was the doubled total earnings of one teacher, and the AIPC of the family

was the family income divided by the average family size. Table 8.18 presents the income comparison.¹⁴

One can see that with both the family income and AIPC, all ranks of academics were higher than that at the national and provincial levels. Besides, the data from the State Bureau of Statistics included all kinds of income, but in my estimation, the black earnings are excluded. That is, the actual family income at HUST should be higher.

However, it should be noted that about 37-55 percent of the earnings were from HUST's self-generated income. Thus, for universities which could not provide extra bonuses and subsidies to their staff, their teachers' earnings would be much lower than the national and provincial AIPC. If salary and performance bonuses only were included, the AIPC for full professor, associate professor, lecturer and teaching assistant families were 4,640, 3,229, 2,371, and 1,994 yuan respectively. That is, except for the two-full-professor families, the AIPC for other teachers' families were lower than that at the national and provincial levels.

Two conclusions can be drawn from this comparison. First, the low academic salary could be an important factor that caused an unstability for university teachers, particularly for junior teachers. Some joint-ventures took advantage of this situation. For instance, the Chinese branch of Procter & Gamble Inc., a US detergent company, recruited front-line managers at HUST in 1995. The entrance-level monthly salary was 2,500 yuan, plus health insurance and residence subsidy. Some young teachers applied. When I asked his opinion of this, Mr. Li, the General Party Secretary of HUST expressed his worry that "currently Wuhan has only a few Western-Chinese joint ventures. If more joint ventures open their branches in Wuhan, we may lose more young teachers. For these joint ventures, HUST is obviously the best local expert source."

Second, increasing teachers' non-salary income was urgent for a university. If the university and departments could not satisfy non-salary income for teachers, teachers

would do it for themselves. This was why “black work” had become popular after 1985. A young teacher told me that: “If I could make 10,000 yuan extra money a year, I would not bother to get a promotion.”

Three Features of the Academic Earnings

In comparison with the West, the earning of HUST’s academics had three features:

- HUST paid the retired people a monthly salary until they died. That is, the reported earnings above excludes pension (see Chapter 9).
- HUST staff did not pay tax of any kind like personal income tax, property tax, sales tax. That is, the reported earnings were equivalent to after-tax income.
- HUST staff did not pay rent if they bought a “welfare apartment”, or they paid a low rent for an apartment, 26-29 yuan per month, about one to two percent of their salary (see Chapter 9).

Excluding these three expenses from the total expenses, the earnings only needed to cover the current living expenses. The governments and HUST had to pay these expenses if the academics did not pay. Otherwise, the governments and HUST had to pay its staff a much higher salary if they asked the staff to pay these expenses. This was equivalent to saying that government and HUST did not pay academics the full salary that they should pay. Instead, the governments and HUST only paid the staff a part of the full salary, just for their current living expense, and took off the rest and used it in a collective way. What was the idea for this arrangement? What were the influences on staff life?

As to pension, the monthly salary for retirement could be seen as a postponed payment. It would be paid until people retired or until it was needed. Before that, this money was used for other collective interests. One condition for this arrangement was absolutely necessary; that the unit promise its members that it would care for them until death. This was a collective arrangement. But this payment was not guaranteed. If a staff

left, not *transferred out* of the unit, this postponed payment would be lost. Thus, this payment bound the staff with HUST.

As to no individual taxes, the government did not use an individual tax system as a tool to collect money from individuals for the public interest. Instead, the government directly collected money from enterprises and gave individuals an after-tax payment. In this way, the government paid public expenses, freed individuals from a tax system and saved the expense of a tax system. This is another collective arrangement. In this arrangement, the dominant economic relationship between government and people was the relationship between public service providers and receivers. If an individual tax system were to replace this arrangement, the relationship could be reversed as people become taxpayers and the government is the tax receiver. This replacement would likely change people's attitude to government because the government is the benefactor in the current system, but in an individual tax system, the people are the benefactor. Currently, China's individual tax system applies only to certain groups of people like private business owners, foreign workers and high-salary (over 800 yuan per month) workers.¹⁵ It is not clear if China will apply a universal individual tax system in the near future.

As to housing, it was assured that HUST would provide a residence for its staff because the salary was not high enough to buy a private residence. Thus, the SEC gave HUST a budget for residence building, and HUST built standard apartment buildings for its staff. HUST staff could enjoy a low-price or low-rent apartment. But they had few choices on housing. Similarly, if one left HUST, this payment would be lost, too.

What was the idea underlying these arrangements? In my view, it is:

Wealth belongs to the collective and is used for collective interests. The private wealth should be restricted to the current living requirement level. Let the collective take care of the rest.

This idea originated from the China's traditional clan system, stemmed from the Chinese communist Party revolutionary bases in China's civil wars (1927-1949) and fully developed in communist China. That is, this idea stemmed from both China's traditional culture and the party heritage, and is still alive in today's China. Thus, one can imagine how far China was from a market system and the related ideology of wealth privatization and individualization in 1995 (see Chapter 9 and 12).

We have examined the human resource management at HUST, including personnel structure, recruitment, training, appraisal, promotion, and earnings.

HUST had six kinds of staff: academics, administrators, support staff, physical workers, social-service staff, and the retired. The first four worked for HUST's committed function, the fifth worked for the living side as HUST was a working/living community, the sixth represented the care of the aged at HUST.

After 1985 two changes occurred in personnel management. First, the SEC changed its budget approach from staff-based to student-based in order to make HUST control its size and work effectiveness. Since then HUST has increased its equivalent student number and increased its manpower input in research and enterprise. But HUST did not use lay-off as a tool in its size control, which reflects HUST's family-like work relationship. Second, HUST applied a multiple approach to its four work systems.

At HUST, the academic ranks were highly associated with age. Most academics began to be promoted to senior ranks after turning forty. HUST suffered a shortage of middle-age academics which resulted from no training for academics during the Cultural Revolution as well as "business fever" and "go abroad fever."

HUST recruited its academics through two channels: receiving graduates and transferring-in staff. In both channels, recruitment was a deal between two units, rather

than a deal between HUST and an individual. This indicates that an academic market did not exist in China in 1995. The recruitment unit at HUST was family, which integrated the staff's family life into work life, and made HUST a working/living community.

At HUST, receiving graduates was the major channel in new staff recruitment. Therefore, academic inbreeding was common. It likely weakened HUST's academic improvement through academic exchange, but contributed to HUST's unity. Interior marriages were common, too. These marriages made HUST a community of relatives. The two factors created a complicated interpersonal network at HUST, which had a strong impact on HUST management.

As most of HUST staff did not have a postgraduate education, on-the-job training was a major measure to improve academic quality. HUST offered four kinds of training programs: foreign language training, teaching skill training, degree study, and study abroad. International intellectual migration was a problem in study-abroad programs. The core of academic training at HUST was the "113 project" which was to train some selected academics as academic leaders. This kind of elite training has been practiced in China for over a thousand years.

HUST established a special promotion system for its annual academic promotion. The university party committee decided upon promotion quotas and supervised promotion work. The discipline committee and subgroups recommended candidates for promotion. The university committee was the decision-making body. In all committees, full professors played the key role.

Criteria for promotion qualification included consideration of politics, professional morality, duty performance and academic achievement. In practice, academic achievements were most crucial. Other concerns like economic and morals were also involved. This showed the mutual influences between the work and living sides at HUST.

HUST's academics had three kinds of earnings: white, gray and black. White earnings were salary and performance bonuses from the government's budget. Gray earnings were work bonuses and subsidies from HUST's self-generated incomes. Black earnings were underground service earnings. Before 1978, white earnings were the only earnings. After 1978, gray and black earnings became two major components. In analyzing the salary changes over the past years, we found that equalitarianism in wealth distribution was still the principle widely accepted and practiced by people as well as the government. In 1995, the gray earnings took about 37-55 percent in the sum of white and gray earnings. All academics at HUST enjoyed higher earnings in comparison with the national and provincial individual income. But when discounting the gray earnings, the earnings for most of the academics were below the national and provincial levels.

In comparison with the West, the academic earnings at HUST were only a partial payment because they excluded pension, individual taxes and housing, basically. This feature made earnings a payment for only current living expenses.

All in all, one can see that a family-like collectivism dominated HUST's personnel management. The labor market reform did not make a remarkable progress in this field. From the case of HUST, I would argue that most people were not ready for a labor market reform. In addition, the current institutions of employment, social services and payment were also unfavorable for the reform.

¹ Some statistic errors in Epitome: The Four Decades of HUST (HUST 1993) are corrected.

² In Chinese higher education institutes, the general figures of the percentage of academics in the total staff in the period of 1984-1993 was represented in Table 8.19.

Table 8.19 Percentage of academics in total staff in Chinese higher institutes, 1984-93 Unit: 1000

Year	academics	total staff	%	year	academics	total staff	%
1984	315	804	39.2	1989	397	1,004	39.5
1985	345	871	39.6	1990	395	1,006	39.3
1986	372	931	40.0	1991	391	1,009	38.8
1987	385	969	39.7	1992	388	1,014	38.3
1988	393	994	39.5	1993	388	1,021	38.0

Source: Data from Zhen Yenming (1994, p. 10)

³ The student-based approach does not imply that the SEC encourages schools to enroll more students. As a matter of fact, the SEC tightly controls the enrollment as we saw in Chapter 4.

⁴ It should be noted that the number of retired increased from 1,108 in 1991 to 1,508 in 1994 despite the staff size increasing to 6,243 in 1991. In other words, the downsize in this period was due to retirement, rather than lay-off. As a matter of fact, HUST did not lay off any workers in this period.

⁵ China established its degree system in 1980. A total of about 300,000 graduates earned their doctoral (about 20,000) and masters (about 280,000) degrees from 1980 to 1994 (Zhu Kaixuan 1995).

⁶ The CCP government was scheduled to establish a labor market system before Year 2010 (Jiang Zimin 1995)

⁷ Here I only address the HUST-funded study abroad participants (*gongfei xiangmu*). The self-funded study abroad participants (*zifei ren yuan*) are excluded as self-funded study abroad was not a part of HUST training programs. Self-funded study abroad refers to the studies which are not financed by HUST or other Chinese government bodies. HUST had 156 cases of self-funded study abroad from 1978 to 1995.

⁸ The most recent detailed information about preparation of Chinese leaders at the highest level see Yan Huai's *Organizational hierarchy and the cadre management system* and Tong Zhan's *The united front work system and the nonparty elite* in C. L. Hamrin & S. Zhao ed. Decision-Making in Deng's China (Armonk: M. E. Sharpe, 1995). The biographies of the current Chinese top leaders in C. Mackerras and A. Yorke, ed.

The Cambridge Handbook of Contemporary China (New York: Cambridge University Press, 1991) also provide some information on the process of Chinese top leader preparation.

⁹ Academic rank system in some universities, e.g., Christian colleges, may be different. For instance, Shanghai Baptist College had an academic rank of "associate lecturer" (Lutz 1971).

¹⁰ The SEC delegated the authority of senior promotion to some key universities. HUST was one of them.

¹¹ As a convention, loyalty is always directly to authors although it is a black earning.

¹² For comparison, I use "new Renminbi" as the currency unit. The currency system in 1952 was "old Renminbi" system. In 1955, the communist government replaced the old system with the new system. The exchange rate was 10000:1. That is, 0.24 yuan in the new system was equivalent to 2,400 yuan in the old system (Fang Weizhong 1984, p. 138)

¹³ AIPC (*zhongguo zhengzhen jumin renjueng shouru*) is the average income per capita in the urban area of China. By definition, it is equal to the total individual income in the urban area divided by the total urban population.

¹⁴ The 1995 AIPC of all provinces and regions in China's urban areas were as following:

Table 8.20 The 1995 national and regional AIPCs in urban China unit: yuan

region	AIPC	region	AIPC	region	AIPC
national	3,895	Fujina	4,024	Qinghai	3,112
Guangdong	6,850	Shandong	3,953	Shanxi	3,048
Shanghai	6,822	Xingjian	3,853	Jiangxi	3,046
Beijing	5,868	Yennan	3,684	Henan	3,029
Zhejiang	5,718	Hubei	3,605	Ningxia	3,026
Tanjing	4,626	Hebei	3,592	Huilongjiang	2,968
Haian	4,346	Sizhuan	3,586	Shanxi	2,927
Guangxi	4,289	Guzhou	3,427	Jilin	2,914
Jiangsu	4,209	Anhui	3,406	Gansu	2,894
Hunan	4,070	Liaoning	3,307	Inner Mongolia	2,587

Source: "Average income ..." Hua Sheng News (1996, March, 15).

¹⁵ In fact, China established an individual income tax system in 1950, but never practiced it (Ma Hong 1985, p. 54). In 1980, China reestablished an individual income tax system, but it is for foreign workers, overseas Chinese and workers who worked for the Western-funded or Western-Chinese joint ventures and

those whose monthly salary is over 800 yuan. Thus, most workers in the state-run work units are free from the individual income tax system (Liu Fuzhi 1991, p. 1696).

Social Services:

The Living Side of HUST

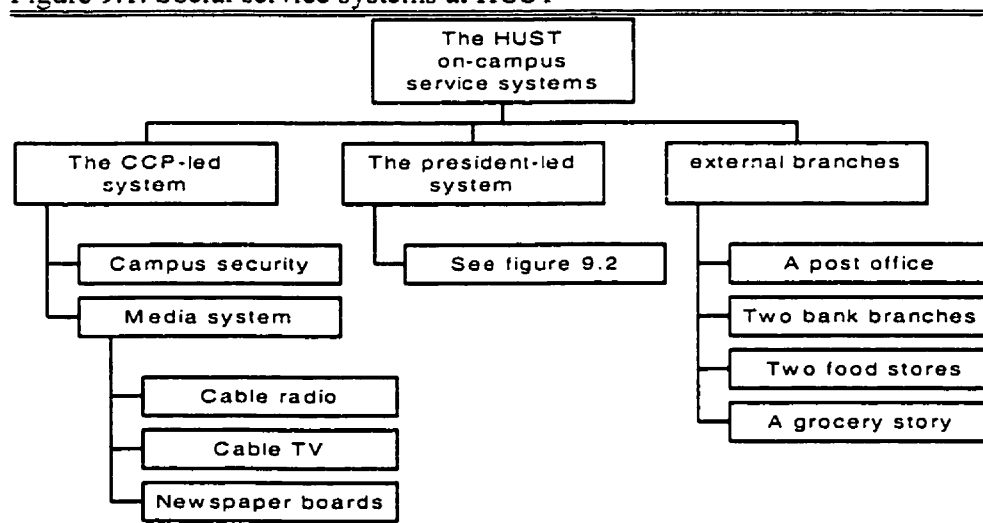
The theme of this chapter is the social services, the living side of HUST. In Chapter 4, it was emphasized that a distinctive organizational feature of HUST is that HUST is a working/living community, rather than purely a workplace. People work and live on the campus. Thus, HUST's management is not just related to working but also to living. In Chapter 8, I have given examples that showed how the concerns from the living side influenced the management of the work side. In this chapter, we will see examples of how the concerns from the work side influenced the management of the living side. If one puts the previous chapters and this chapter together, one will see how the working side and living side are mutually influenced at HUST.

This chapter has seven sections. Section 1 is a brief picture of the entire social-service system at HUST, particularly focusing on its own social-service system. Then in the next five sections, the health care, housing, child care, care of the aged, and the other social services will be introduced respectively. After learning this system, the reader may ask: Why does HUST need to run such a complete in-house social-service system? This issue is addressed with a perspective of new institutional economics, arguing that *economically*, a possible reason is that the system could provide HUST with lower-cost social services. Thus, this system likely exists as long as it can continue to do so.

Three Social Service Systems

There were three social-service systems on the campus in 1995: the campus security and media system, the social-service system and the external social-service branches. The university party committee led the security and the media system. A vice president led HUST's social-service system. The external service branches were run by their top authority. Figure 9.1 presents the three systems.

Figure 9.1. Social service systems at HUST



Source: Field notes

The security system had two sub-systems, the university security system and the resident committee system. The university security system dealt with issues of campus security and residence registration with delegated authority from the local police station. The resident committee system helped the university security system to maintain social security in the residence area. Each residence area had a residence committee. A total of six residence committees were on the campus, three in the east and three in the west. The workers in the residence committee system were the retired people. The local policemen rarely enter HUST except for serious criminal cases.

The media system included a cable radio broadcasting system, a cable TV system and a newspaper board system. The radio system was the major medium. It broadcasted

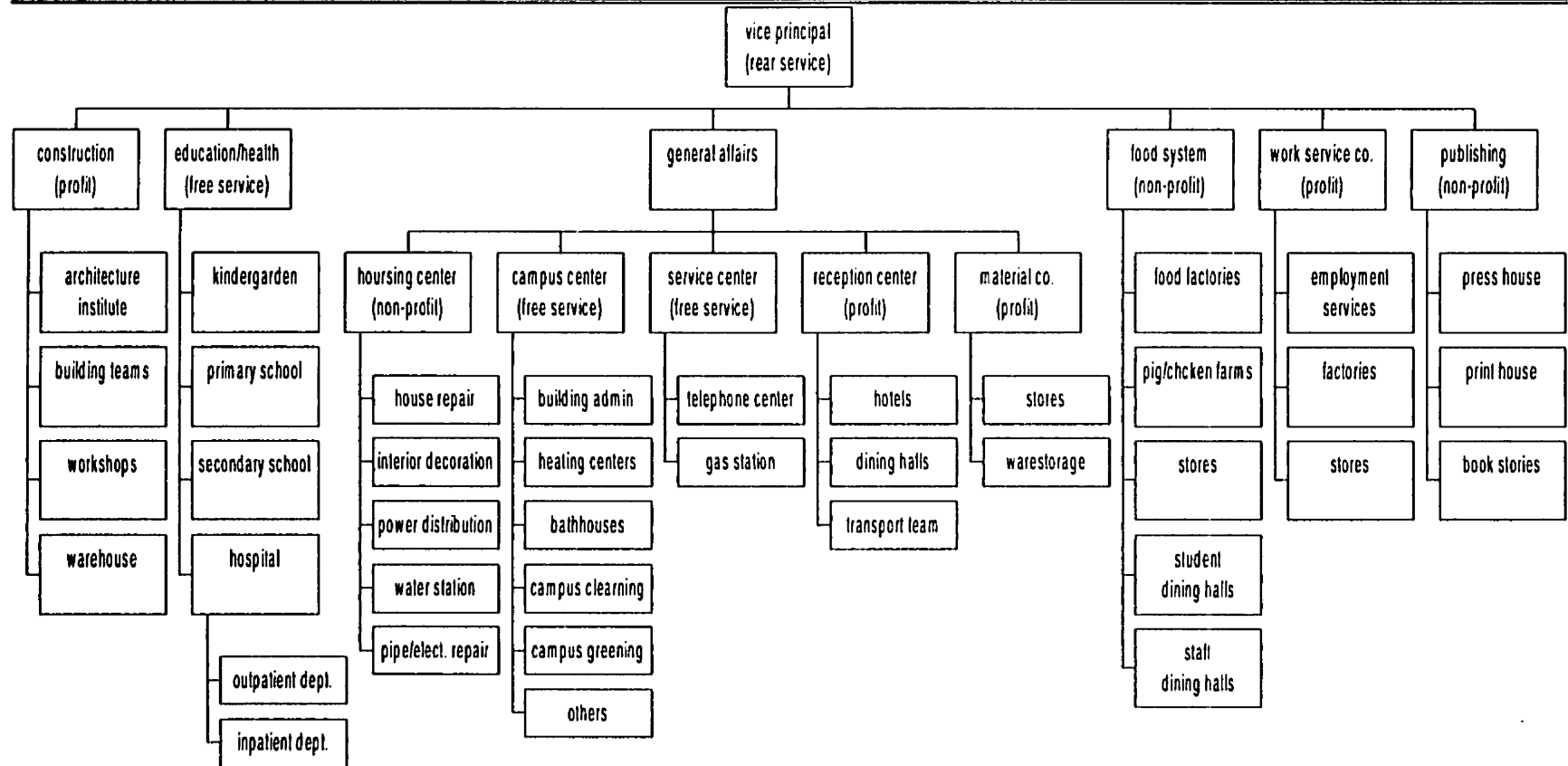
news morning, noon and evening according to HUST's work/rest schedule. As its voice could be heard from everywhere on the campus, this broadcasting functioned like the sound of church bells. People at HUST changed their daily activities according to its voice, instead of looking at their watches. At a meeting, the chair may say: "Oh, the broadcasting is on. Okay, let us stop here today." The cable TV system was different, mainly an entertainment system. Every night, the cable TV system showed one or two movies after school news. In addition, several newspaper boards stand in front of all student residence buildings and all crossroads in the residence area. The boards of People Daily, a major national newspaper, Yangzi Daily, the major newspaper of Wuhan City, and HUST News, the school weekly newspaper were changed every day. Most people got the news from these boards, few subscribed to the newspapers themselves.

Six external service institutes ran branches on the campus. They were called "external-service units on the campus." Later we will see that they also enjoyed some benefits from HUST as they serviced HUST.

But the core of the HUST social-service system was its own social-service system. This system consisted of six major sub-systems: the construction system, the child care and health care system, the general affairs system, the food supply system, the Work Service Company and the university press. The entire system is presented in Figure 9.2. This was a very complete in-house social-service system, and was able to provide most of social services to the HUST residents for their daily lives.

In Chapter 8, we saw that HUST applied a multiple approach to its social-service system management. The service bodies were divided into three categories: profit-making, non-profit and free-service. The profit-making bodies ran as enterprises. These bodies needed to generate money to cover their cost (i.e., salary, bonus, subsidies, rents for using university's facilities) and to submit an amount of profit to the university. The non-profit bodies also ran as enterprises but they did not need to generate profit. Their income only needed to cover the operating cost. The university provided them with

Figure 9.2 The HUST's social-service system



Source: Field notes, HUST (1995f).

facilities, i.e., houses and high-cost equipment. As their income covered only their operating costs, more accurately these bodies should be called “operating-cost bodies.” Their customers actually used the university-provided facilities for free. There were two types of free-service bodies. One was no-charge services like campus cleaning and gardening. The other was the bare-charge-for-cost services. That is, the staff paid only the minimum cost from the original resources and enjoyed free services. For instance, charges for telephone and gas were the same as the original resources. The university did not add extra charges to them, although the university established the service bodies to help staff get these services. From Figure 9.2, one can see that most service bodies which provided services directly related to staff daily life were either non-profit or free-service bodies. Thus HUST staff’s earnings equivalent to the after-tax income in welfare countries.

A related phenomenon was that people growing up in such an environment did not have a sense about taxes like individual income tax, sales tax or property tax. But they did have a strong sense about the benefits of a work unit. As different work units provided different benefits, these benefits directly influenced the life quality of their staff. Thus people tended to work at a work unit that could provide better benefits. In turn, the work unit could use its benefits as a tool to attract capable people as Mr. Li, the General Party Secretary of HUST told me:

Last year, we spent two million yuan to build a very beautiful building for the kindergarten. I showed it to the people studying abroad. I told them that “Your children will be well cared for at HUST.” In fact, you cannot find a better kindergarten at all the universities in the Wuhan area, or even in most universities.

The other management change in the social-service system was “socialization of social services within HUST.” That is, the university encouraged competition among all service units, but restricted them within HUST. For instance, before 1985, each of the dining halls served only the students from certain departments. Students from other departments could not dine at a dining hall where they were not supposed to have meals. Now, all students and teachers could dine at any dining hall. The performance and work

bonuses of the workers of each dining hall were determined by the number of customers it attracted. This change put dining halls in competition. The same principle was also applied to other service systems. Thus, a "market" appeared on the campus. But these services were not offered to external units without university permits. In case external units needed HUST's social services, HUST were consider first if it had extra capability, and then HUST charged for the services on a profit-making base, or at least the full-cost base. In general, HUST was reluctant to share its social services with external units. That is, the HUST service "market" was "closed." This was the essence of the "socialization of social services within HUST." The charge differences for HUST staff and for the staff of external units give us an opportunity to estimate the values of services which HUST's staff enjoyed for free. I will use this method in the following.

Now we look at four major social services, i.e., health care, housing, child care, and care of the aged, and management.

Health Care: A Collective Vision

HUST provided health care services to all its members, staff, students and the staff's children who were under the age of 18. HUST had a hospital that had more than ten specialized clinical departments, a pharmacy and two inpatient departments equipped with more than one hundred beds. This hospital was able to offer to HUST members general medical care. For the cases that the hospital could not handle, the patients were transferred to other hospitals for special treatment.

Before 1985, the health care at HUST covered both clinical services and medicine, completely free for all HUST staff and students and fifty percent free for the staff's children. The SEC gave HUST a special budget for health care. The budget was calculated by the number of the people covered, eighteen yuan per person before 1961, twenty yuan from 1960 to 1978 and thirty yuan after 1978. However, after 1978, the health care budget from the SEC could not cover actual expenses due to both inflation after 1978 and the abuse of the health care system. Thus after 1985 the SEC planned to replace the free

health care system with a health insurance system. The new health insurance system should be funded by the government, university and individuals, that is, universities and individuals were asked to share the health care burden (Jiang Jinghua & Pu Zhonghe 1995, p. 377)

However, in my fieldwork, I did not find any universities that actually established a health insurance system. But I observed two approaches in dealing with health care expense which I call: "individualized vision" and "collective vision" respectively.

Some universities distributed the money from the government health care budget to all covered persons whether they were sick or not. And then their university hospital or clinics fully charged patients. That is, this approach was to let individuals make their own financial plan for health care. I called this "individualized vision." One problem of this vision was that some people, particularly young, were likely to spend their money on something rather than on health care. But some people, the aged and those with chronic diseases, had to devote a part of their salary to health care as the distributed money was not enough to cover their health care expenses.

HUST did not use this approach. Instead, it pulled all the money together to keep a basic free health care system. That is, HUST took the main responsibility to fill the gap between the SEC budget and actual expenses on health care. I called this the "collective vision." Table 9.1 presents the health service charges at HUST.

Table 9.1 Health care charges at HUST, 1995*

	normal	emergency
clinical care	0.2 yuan	0.5 yuan
	prescribed	non-prescribed
medicine	free	self pay
special examination	10 yuan/per term	
inpatient care	free	
	permitted	without permit
external medical care	95% free**	self pay

Source: Data from field notes, HUST (1995f)

* Children under eighteen were charged at half cost.

** Staff paid five percent of the cost if it was under 500 yuan, or 500 yuan if over 500 yuan.

Obviously this was a big benefit to its staff. But it put an extra financial burden on the university's shoulders. It is true that only the universities who had money to fill the gap were able to adopt this approach. But I consider that the collective vision in the HUST management was the main reason for HUST's adoption of this approach.

Housing: The Influence of Performance on Housing

Housing refers to providing a residence for the staff. It was a convention in China that the state-run work unit had an obligation to provide its staff with a residence. This convention started in 1952, but it changed during the 1990s.

Before the 1990s, China practiced a low-rent policy on housing to support its low salary policy. The rent only covered the expense of house repairs. If universities needed to build new residences, the government would give a special budget. That is, the government took the responsibility for house building, and universities and individuals took responsibility for house repairs and maintenance. As a consequence, a university could not provide its staff with better residences if the government had no budget for it. It was this that caused a serious shortage of residences in all universities at large cities. For instance, at HUST, the junior staff families had only 7 m² room space per person on average before 1985. This badly affected their work as HUST did not provide teachers' offices.

To solve the housing shortage problem, a new policy was proposed by the government. It was called: "reasonably sharing the financial burden of housing among the government, the university and the residents" (PBSEC 1994, vol. 1, p. 10). Two major measures were to raise rent and to sell residents a residence apartment. By this way, the government could collect money to build new houses. This change was called "housing reform." HUST carried out this policy in 1994. But HUST used its housing policy not only for raising money but also as an incentive to improve staff performance and to promote the unity of the HUST community. In practice, the last two were more important.

HUST provided an apartment for the staff members with family and a dormitory room for the single staff members. HUST built five types of apartments: four-bedroom (80-100 m²), three-bedroom (60-70 m²), two-bedroom (40-50 m²), one-bedroom (30-35 m²) and one-bedroom without living room (18-20 m²). The apartment distribution was based upon a housing-point system:

Total points = (basic points) + (work-year points) + (family-size points) + (special points)

Each family was assigned an apartment according to its total points; families with higher total points selected apartments first. Thus, the only way to have a better apartment was to get higher total points. This made HUST's housing policy a policy for performance improvement. Table 9.2 presents the points of the four components.

Table 9.2 Housing point system of HUST

	academics	administrators	points
basic points	full professor	university heads	68-70
	associate prof.	Dept. heads	61-63
	lecturer	other heads	52-56
	T.A.	clerks	45-50
work-year points*	1 point per year		
family-size points	1 point for each person		
special points	won a national award		8-15
	won a national work model		10
	disabled veterans		5
	returned overseas Chinese		4
	democracy party leaders		3
	one-child family		2
	family having overseas relatives		1

Source: Data from HUST (1990, p. 1-10). This is a simplified table according to the original regulations. It only listed the points for academics and administrators.

Housing points for other staff were similar.

* including work years at other work units

Clearly, rank and work years were the two most important components. That is, this system directly linked the staff's living condition to their performance, and in turn the desire for better living conditions became an incentive for performance improvement. A retired lecturer never dreamed of moving into a good three-bedroom apartment, and the associate professors who failed to be promoted to full professors before their retirement would not be assigned a four-bedroom apartment.

In practice, HUST announced vacant or newly constructed apartments each year and let the staff select, from the highest total points down. But only the staff who had lived in their current apartment over three years were qualified to join a new selection. Thus each year about one third of the HUST families moved into a better or larger apartment. Thus moving became an annual event at HUST. Each December, people were busy moving out and in. Once everything settled down, it was nearly New Year's Day.

As this policy tightly bound housing with academic rank, it put extra pressure upon the academic side, particular academic promotion. Academic promotion was not just for recognition but also related to the living conditions of a family. Thus, the promotion committees actually, not always, kept this concern in mind when they made decisions. It should be noted that the housing policy was completely different from the work bonus policy. One could have a higher work bonus, or make considerable black money, but could not be assigned a good apartment if s/he failed to get promotions.

This housing-point system was the foundation of HUST's housing policy. On top of this, staff had two options: buy their assigned apartment or rent it. In general, senior staff tended to buy their apartment and juniors tended to rent.

A potential problem in apartment selling was how to maintain the campus management and security. HUST applied a strategy of real property control on its house sales. This policy had four major points:

- HUST only sells the "use" of the apartments to the staff and keeps the ownership. The users use their apartment only for themselves. All sold apartments should not be used as mortgage, gifts, or compensation of any kind. The users should not use their apartment to run business.
- If the users leave HUST, they must sell this property to HUST.
- If the users die, their children and parents can use the apartment. If their children and parents leave, they must sell this property to HUST.

- The users who bought the “use” of their apartment do not need to pay rent.

The first three points of the policy guaranteed that all apartments were used only by HUST staff and their family. On the surface, this was the continuation of the policy that HUST had an obligation to provide a residence for its staff and their family. However, as this policy allowed only its staff and their family to *use* the apartment, in the long run, all residents would be either the HUST staff or their families. In this way, this policy actually supported the unity of HUST community and campus security.

As HUST sold only the “use” of the apartments to its staff, the price was very low. Table 9.3 presents the prices in 1994.

Table 9.3 Prices of the “use” for residence apartments, 1994 unit: yuan

built year	price per m ²	average price	80 m ²	60 m ²	40 m ²	30 m ²
1993	251	251	20,080	15,060	10,040	7,530
1990-1993	200-211	206	16,480	12,360	8,240	6,180
1980-1989	146-176	161	12,880	9,660	6,440	4,830
1972-1979	120-140	130	10,400	7,800	5,200	3,900

Source: HUST (1994b)

With these prices, the annual family income of a two-senior-professor family, (19,272-24,144 yuan) in 1994 was enough to “buy” a 80-m² brand new apartment built in 1993. However, the average building cost (excluding land price) at HUST in 1994 was 563 yuan/m².¹ That is, the staff paid only about forty five percent of the building cost and none of the land cost. For the apartments built before 1993, the prices were even lower. This was a benefit. So, people called this kind of house a “welfare house” (*fulifang*).

The staff could rent their assigned apartment, too. Usually they were junior staff and lived in a one- or two-bedroom apartment. They knew clearly that the best time to buy an apartment was after being promoted to senior rank. At that time, they would be assigned a three- or four-bedroom apartment. Thus the junior staff tended to rent their apartments. The rent was 0.32 yuan/m². The monthly rent for a one- or two-bedroom apartment was about ten to thirteen yuan.

However, HUST asked the staff who rented apartments to deposit 1,600 yuan as a housing fund. This money would be returned without interest after five years. Thus, if calculating the interest of the deposit at an annual rate of ten percent, the total interest in the five years should be 977 yuan, or sixteen yuan per month. That is, the actual monthly rent should be twenty six to twenty nine yuan, about one to two percent of their family monthly income (see Table 8.13). This rent was very low and also could be called a “welfare” rent. In short, in cases of both buying and renting an apartment, the housing at HUST was a benefit.

To help the staff, HUST established a housing fund in 1994. Individuals put an amount of money, five percent of their monthly salary (fourteen to thirty one yuan a month), into the fund and the university matched the sum. This money would be used only for buying houses or house maintenance. If a staff member left, the university would return the money to the person. That is, HUST increased the staff’s salary five percent, specifically for housing.

Two things were significant in HUST’s housing. First, HUST used its housing as a performance incentive, linking the staff living conditions to their performance. Second, to ensure the unity of the community and campus security, HUST sold only the “use” of houses and retained ownership. Some studies suggested that China’s housing reform may have undermined the work unit’s control over their workers (for an example see Shaw 1996). The case of HUST does not support this viewpoint simply because *buying* a residence does not mean *owning* the property, but means paying a fee for its *use*. This also calls for studies of ownership and the related practices in China. The housing reform at HUST was basically a way to collect money from individuals to provide more residences for the staff, and HUST’s control over its workers through housing was still maintained in 1995.

Child Care: From Cradle to Higher Education or Job

Child care was the third major benefit at HUST. The child care system at HUST included a kindergarten (six months to six years old), a primary school (seven to thirteen years old) and a secondary school (thirteen to nineteen years old). After the children finished their secondary education, HUST continued to carry out its duty toward their higher education and jobs. That is, HUST actually took care of the children of its staff from cradle to higher education or job.

In general HUST's child care system was only for the children of its staff. But in a few cases, HUST's child care system provided services to external units like the on-campus external service branches and neighboring universities, but at full cost. We can use the fee difference to estimate the amount HUST spent on its staff for child care. Table 9.4 presents the price differences in 1996.

Table 9.4 Price differences on child care, 1996* Unit: yuan/year/child

	HUST staff		external branches	other units	difference**
kindergarten	child	grandchild			
0.5-3 year old	100	556	760	986	886
4-6 year old	120	570	780	1006	886
primary school	100	400	600	N/A	
middle school					
junior	200	700	800	1000	800
senior	450	950	1150	1650	1200

Source: Collected from these institutes.

* including tuition and other charges.

** differences between the second and fifth columns.

One can see that HUST spent about nine hundred yuan a year on each child. For the units who did not have their own child care system, their staff had to pay for their child care. Besides, HUST's child care system not only covered the staff's children but also their grandchildren. The charges for the external service branches were less than that for other units. That is, they also benefited from the HUST child care system.

After the children graduated from the middle school, HUST would take care of their higher education and jobs. HUST had several strategies for this. For the children

whose score was higher than the local lowest score (LLS) for key universities, HUST would take them into HUST. For the children whose score was lower than the LLS for key universities but was higher than the LLS for the ordinary universities, HUST would ask some universities to take these children, and HUST would return these favors when these universities needed help from HUST (see Chapter 5). For the children who failed the exam and wanted to have a higher education, the Adult Education School of HUST would take them. For those who wanted to work, the Work Service Company (*laodong fuwu gongsi*) would provide them job training and give them a job at the company or help them to find a job. The history book of HUST described the history and achievements of the company:

The Company was established in 1982. This company provided work skill training and job arrangements for the staff's children. In the past years, The Company ran thirty training classes, trained 623 students and arranged 1215 jobs (HUST 1993, p. 313).

Clearly, the child care of HUST was very complete. It was, in my view, a continuation of the child care in the traditional Chinese family/clan system. In this sense, HUST was really a big "family."

Care of the Aged: Retired Life on the Campus

Another important social institution in the traditional Chinese family was care of the aged which can also be found at HUST. It is the care of retirees. In the Western system, a university is a workplace, thus the care of the retirees is not a university's responsibility, and thus not a part of university management. Once a worker is retired, the person immediately disappears from the place where she/he worked. Retirement leaves individuals to care for themselves, or to be cared for by social services. At HUST, things did not happen in that way. The retirees were still counted as HUST members. The university still assumed its responsibility to care for the retirees. Retired people could enjoy their retired life and many privileges on the campus until their death. Thus at HUST, the care of the retirees was a part of the HUST management.

As a rule, the age of retirement was sixty for males and fifty five for females. Full professors could work until the age of sixty five. However, all retired people could be re-hired and perform the same duty as before, except to be heads. HUST did not set any age ceiling for re-hiring. In fact, the shortage of teachers made re-hiring inevitable.

People retired in two ways; one was called "left" (*lishou*), the other was called "retired" (*tuiuxiou*). "Left" was special, and was only for the people who worked for the Chinese Communist Party (CCP) before its 1949 victory. As these people had joined the CCP work force earlier, most of them were promoted to a leader position before they retired. These people were considered to have made a great contribution to communist China. To show respect, the government coined a word for their retirement: "left cadre." Literately it means they "left" rather than "retired" from their position. The government gave the "left" many privileges for their retirement. They could enjoy their benefits, e.g., housing, health care, salary, the same as before. Thus, for them, nothing would be changed except their previous position. In addition, the University CCP Committee established a special department in charge of caring for the "left." Although they "left," many of them had strong influence on school affairs. They were invited to advise on university affairs regularly. These arrangements for the "left" were designed to express an appreciation for their contribution to the CCP victory and to make them feel that they were still in the organization and as important as before. HUST had 361 "left" staff in 1993.

Those who had come to work after 1949 were simply called "retired." The university personnel department had an office to take care of their retired life. The "retired" people could not enjoy previous their full privileges. They were paid only ninety percent of their previous salary but received full benefits. If the government increased the salary for other staff, both the left and the retired would enjoy a salary increase, too.

However, both the left and retired could not have work bonuses, e.g., teaching bonus and research bonus. This reduced their earnings by about 23-28 percent (see Table 8.17). Their living standard likely declined. Thus, after 1991, three times the province asked HUST to give special subsidies to the retired (see Table 8.16). In 1995, HUST decided to set a special fund for the retirees' subsidies. The announcement clearly illustrated HUST's attitude to its retired members:

All faculties, departments, sub-units and administrative departments:

The left and retired comrades are very valuable to our university. They played a pioneering role in very hard conditions and made a great contribution to HUST in its establishment and later development. They laid a solid foundation for the further achievements of HUST in aspects of teaching, research, entrepreneurship and social services. In the principle of sharing the collective outcomes and considering the actual difficulty that the left and retired have, the Standing Committee of the CCP Committee of HUST decided that [HUST] will increase the subsidies for the left and retired from January of 1995. All units of HUST should share the expenses. HUST will take off 0.5 percent from all self-generated incomes to establish this fund. This decision effective January 1, 1995.

The Standing Committee of the CCP Committee of HUST

August 30, 1995

This decision interested me in four ways:

- This decision clearly showed HUST's attitude to its retired members. HUST respected all retired members as they had made contributions to the university. Thus HUST would not cut off its relationship with them. On the contrary, HUST would continue its responsibility for their retired life.
- The party committee made this decision, rather than the university administration.
- The date of the decision was nine months later than its effective date. In fact, it was an urgent decision. Before, the retired received their living subsidies from their previous

units. As these units made different extra incomes, the living subsidies in different units were not equal. This caused the retired staff to complain. Thus, HUST decided to give all the retired staff an equal living subsidy and asked all units to share the expense. That is, the university took over the responsibility from the sub-units.

- This was a long-term policy. That is, HUST had no intention of cutting off its relationship with the retired in 1995.

Even so, the living subsidies were not enough to maintain the retired staff's living quality. So, the university planned to establish a new attached college. This college would have the retired teachers as the major teaching force and share other facilities with HUST. This plan was under development when I left.

The subordinate units were responsible for caring for the daily needs of the retired. The party branch secretaries were in charge of this work. They provided help to the retired for their daily living needs and visited them on holidays. A funeral was the last service a member got from the unit. A typical death announcement follows:²

Obituary

To our great sorrow, Comrade Lou has passed away at the hospital yesterday, at the age of sixty-nine. He suffered from diabetes for years. All rescue measures proved ineffective. He was a retired worker in the Construction Department. All of his family members, relatives and friends, please gather at the front door of the Transportation Team tomorrow at 10:00. A bus will take all participants to the funeral place. Please inform each other.

Construction Department of HUST

October 10, 1995

It should be noted that the unit which the worker worked for, *not his family*, held the funeral to mourn him. His family played only a participatory role. HUST would pay the bill for the funeral. This arrangement delivers a clear message that the worker belonged to the unit and HUST first, then the family. This idea was exactly the same as the collectivism in the Chinese clan system. Individuals belonged to the clan first and then their family. This tradition seemingly followed from Mao's suggestion. In 1944, a soldier died. Mao participated in the funeral and gave a speech. He suggested:

From now on, when anyone in our ranks who has done some useful work dies, be he soldier or cook, we should have a funeral ceremony and a memorial meeting in his honor. This should become the rule. And it should be introduced among the people as well. When someone dies in a village, let a memorial meeting be held. In this way we express our mourning for the dead and unite all the people (Mao 1967a, vol. 3, p. 177).

Comrade Lou had gone through his life at HUST. But HUST's service did not end with his death. His family still lived in his apartment and enjoyed various services. His children may work somewhere at HUST and become the new generation of HUST.

Other Services at HUST

HUST also offered its staff other services which were summarized in Table 9.5.

Table 9.5 Miscellaneous services at HUST, 1995

item	type of services	charge
water	free service	0.08 yuan/ton
electricity	free service	0.22 yuan/kilowatt/hour
gas for cooking	free service	26 yuan/month
worker clubs	free service	free
internal cable TV	free service	1 yuan/month
telephone	free service	5 yuan/month
resident area security and cleaning	non-profit	2 yuan/month
public theater	non-profit	0.3 yuan/movie

Source: Field notes.

Why HUST Needs its Own Social-Service System?

In the above six sections, we have seen HUST's social-service system and various social services. One can see that indeed HUST ran a very complete in-house social-service system. They stated a fact when HUST people said: "One does not need to leave of the campus except at death." Thus the reader may ask a question: why does HUST need such a complete in-house social-service system? Now we address this question from a perspective of new institutional economics.

The new institutional economics argued that people can gain goods or services in two ways, either buying from a market, or producing by themselves through establishing a firm. The cost of operating a market is called *transaction cost*; and the cost for running an in-house firm is called *administration cost*. The two costs are exchangeable economically but cause different organizational effects. Obtaining a service through a market system implies reducing the function of organization, or *function reduction*. Getting a service through an in-house production implies integrating a function into an organization, or *function integration*. They are two opposite directions in organizational development.

For an economically rational person, one should get a service through the market if the transaction cost for the service is lower than its administration cost, or one should run in-house production of the service if the administration cost is lower than the transaction cost. In other words, both options are economically rational. Thus an economic rational choice depends on the cost difference of two options in a given society.

Theoretically, if a firm fails to make its administration cost lower than the transaction cost in a given market, this firm cannot make profit and will fail. In other words, a firm comes into existence in a given society simply because it can make its administration cost lower than its transaction cost. In this view, the existence of a firm can be seen as a consequence of its lower administration cost (North 1995, 1997, Toye 1995, Acheson 1994, Bates 1994)

New institutional economics provide a new angle in viewing the nature of organization, organizational structure and organizational changes. Particularly, it links organizational structure, functions and changes to its competitiveness in a given society. Thus it is suitable for studying the originality and future of the social-service system of HUST.

It is interesting to note that the 1985 educational reform suggested cutting off this social service system from universities as it was a non-academic system. However, the actual progress did not go in the suggested direction. HUST's social-service system has been enhanced since then. Why did things happened in the opposite way? An assumption of the 1985 educational reform was that non-academic organizations *should* not exist in academic organization. This view started with organizational specialization, but did not take the social conditions into account. In contrast, new institutional economics perspectives suggested to researchers to take into account the social conditions, particularly economic institutions, when conducting organization analyses.

Why did Chinese universities establish a complete social-service system? A textbook of the social-service management in Chinese universities gave three reasons:

First, when they were established, most Chinese universities were located at the outskirts of a city. Social service industries did not extend to these areas at that time, and the local government could not provide universities with these services. It is particularly true for universities located in the large and middle-size cities because these cities always had a short supply of living materials and social services. Thus the government in these cities had no extra capacity to provide the living materials and services for universities. Second, to ensure universities' supply of energy, oil, grains, other foods, the state and local government made protective policies on supplements, prices and taxes. As a result, the university-run service systems gradually became larger and larger. Third, the government budget for universities was relatively insufficient. Universities could reduce expenses and increase the effectiveness of the budget by running in-house services. In the past decades, university-run service systems made not only a great contribution to uni-

versity development, but also saved considerable amounts of money for government and also lightened the service burden from the local government (Jiang Jinghua & Pu Zhonghe 1995, p. 7)

If using the terminology of new institutional economics, four inferences from the above would be:

- The transaction costs could be extremely high due to the universities' location and constant shortages in materials and services for living in the locations.
- The administration costs could be lower if a university ran its own service system.
- It was a rational choice that Chinese universities ran a social-service system.
- This system is likely to exist in universities if the situation continues.

The history book of HUST described the local social situation in 1953. At that time, the location was "twelve kilometers away from the Wuzhang downtown," "surrounded by farmlands," "had no water and electricity supply, no communication facilities and no commercial site" (HUST 1993, pp. 2-3). That is, these drawback in the location could mean an extremely high transaction expense if HUST insisted on buying these services through the market. If these services were completely unavailable from the market at that time, it is equivalent to saying that any administration cost for these services would be lower than the transaction cost. Thus to build an in-house service system was a rational choice.

In its establishment, the first thing HUST did was to build the systems of water supply, electricity and communication, and then a twenty kilometer on-campus road system. For transporting building materials, HUST built a port on the Yangzi River and a port at East Lake. HUST built its wood workshop for woodworking. Then HUST constructed its work and living facilities. During the period of 1953-1957, HUST built eight teaching buildings, four laboratory buildings, one teaching factory, one library, ten student dormitories, five dormitories for single staff, five dining halls, eighty-three dormitories for staff, one university clinic, one kindergarten, one primary school, two football

fields, twenty-three basketball courts, twenty volleyball courts, one gymnasium, one open movie field and two clubs, one for students and the other for teachers. These facilities were enough to support six thousand students and one thousand staff who worked and lived on the campus. The total cost was 21,780,000 yuan (HUST 1993, p. 2, p. 34).³ In short, at its beginning, HUST had to build a social-service system to ensure its survival in the location. All these facilities have been improved over the years and functioned at HUST in 1995, except the ports.

When I first time came to HUST in 1982, the location still lacked social service facilities, was surrounded by farmland, and had few commercial sites in the area. There was only one bus line from the Wuzhang downtown to HUST, a one-hour ride each hour, very crowded, running on a very bad road. In 1995, the situation had improved greatly but not changed fundamentally. The location still lacked necessary service facilities. For instance, the major post office in the location was the one on the HUST campus. The transaction costs for social services were likely higher than the administration costs. The following are two examples.

First, some work units in the location asked HUST to provide child care services. The fee difference for HUST staff and for external unit staff was about 900 yuan per year for each child. This can be used as an estimator of HUST's expense for its child care. In 1995, HUST had about 4,444 families on the campus.⁴ If assuming 3,000 families had a child in HUST's child care system, the annual expense was about 2,700,000 yuan. That is, either HUST ran a child care system by itself, or paid 2,700,000 yuan or more each year to buy child care from somewhere else.

Second, the 1994 building cost (excluding land price) in the HUST construction system, a profit-making system, was 563 yuan/m². The commercial price (including land price) of a residence apartment in Wuhan in 1995 was about 1,500-3,500 yuan/m². If we calculate the land price at 300 yuan/m² in HUST campus, the building cost in the HUST construction system would be much lower than the commercial price.

These examples show that the HUST social-service system was able to provide services at considerably lower cost to the HUST community although the local social services had been greatly improved by 1995. Thus in 1995, the transaction cost of the social services in that location was likely higher than the HUST administration cost. This could be the reason that HUST kept its social-service system, and was very reluctant to share its social services with external work units. But it should be pointed out that the above are examples, not an economic analysis.

A remaining question is: is it possible that HUST would cut off its social-service system in the near future, for instance, in the next decade? This question was presented to the president and the party secretary of HUST. They both considered that HUST should not cut off its social-service system in the next ten years. Instead, they emphasized that HUST should enhance its social-service system, rather than weaken it.

No doubt that it will probably take a long time for China to build a market system in which the transaction costs of social services will be lower than the administration costs in HUST's location. Thus, in the near future, HUST would keep, rather than cut off, its social-service system. Thus this system is likely to exist as long as it is able to provide lower-cost services for HUST.

This chapter described HUST's social-service system, particularly the health care, housing, child care, and care of the retirees. In studying HUST's social-service system, we saw three features.

First, HUST's social-service system is a major component of HUST's organization and thus the management of the social-service system is a major part of HUST's administration. This makes HUST a highly self-sufficient organization, closer to the Chinese traditional family and greatly different from the Western universities.

Second, HUST used its social services as a management tool to improve its performance. For instance, HUST used its social services to keep and attract capable people and link housing to individual performances. In this way, the management of the working side and the management of the living side are integrated. Thus, taking the case of HUST, it can be concluded that a study of Chinese university administration without considering the influences from the living side would be incomplete.

Third, there is a collectivistic vision which dominates the management of HUST's social services, which can be observed in the health care, housing, child care, and care of the aged. This vision can be expressed as: a collective should be obliged to take care of the needs of its members.

Finally, I discussed the originality and future of HUST's social-service system from a perspective of the new institutional economics. I concluded that HUST's social-service system originated from the drawbacks of social services at the location; and the social-service system was likely to exist as long as it could provide lower-cost services to HUST.

¹ I did not get the actual building cost of 1993. It should be noted that the construction system was a profit-making system. The land cost is excluded as all buildings were built on the campus.

² The name, work unit and date has been changed for anonymity.

³ The data was from the CCP General Office of HUST. All investments in this period of time is in the price for that year and in the new Renminbi system (for details see Endnote 12 in Chapter 8).

⁴ HUST had a total of 4,444 residence apartments in 1995 according the data from the CCP General Office of HUST. That is, HUST had at least 4,444 staff families on the campus in 1995.

Finance and the University-Run Industrial System

We have looked at some aspects of HUST's finances in the previous chapters. In Chapter 8, it was pointed out that 37-55 percent of the academic earnings were from the university's self-generated incomes. In Chapter 9, we saw that HUST adopted a collective vision in its social-service management and took the major responsibility for its social-service system and offered many benefits to its staff. All these created heavy financial burdens for the university. Moreover, HUST could not solve its financial problems through increasing its enrolment, as this was controlled by the SEC (see Chapter 5). Thus, HUST had to generate money to solve its financial difficulties. There were two major ways. One was to generate research funds by conducting research. The other way was to run an industrial system. This was a new activity for China's universities. It meant that HUST would integrate a new function into its organization. This raised a debate within HUST as elsewhere in China.

It is interesting to note that there is a profound divergence between HUST and its Western counterparts in dealing with their financial difficulties. In the West, if a university has financial problems, it tends to cut its non-academic functions and even unimportant academic programs and activities. But HUST took the opposite strategy: integrate more non-academic functions. This difference is very meaningful. I will address it from a perspective of the new institutional economics.

In this chapter, we first look at the shift of the government role in HUST's finance, then look at the plan of developing a university-run industrial system, finally the HUST internal financial management.

Shift in Government Funding: From a Major Role to a Minor Role

In the past two decades, the most significant change in HUST's finance was that the government's role changed from major to minor. The university self-generated income had become the major sources of HUST's revenue after 1990.

HUST had two financial sources: a government budget and self-generated income or "non-budget income (*yusuan wai shouru*). Each year, the SEC gave HUST three kinds of budgets: operational budget, capital construction budget and general research budget. The operational budget can be further divided into two parts: personnel expenses (*renyanjingfei*) like salary, benefits and daily operating expenses (*gongwufai*). The capital construction budget was for constructing new buildings and for expensive facilities (50,000 yuan or more). The general research budget was for general research activities related to teaching improvement. It did not fall within research project grants.

Before 1985, the operational budget was based upon a principle called "basic budget plus budgets for development. "Basic budget" referred to the previous year's operational expenses. It remained constant. If there were new needs, they were supported by the "budgets for development." The budgets for development depended upon the government's financial situation each year. As a consequence, universities tended to spend all their money in order to give the governments an impression that the government budget for operation was not enough. Universities needed more money, or at least, the same amount next year. Another consequence was that universities tended to increase their staff as the governments paid the staff expenses. Thus this budget approach was replaced by a new budget approach called "total student quota plus special subsidies." The SEC gave a budget measure unit called: "budget quota per standard student." The exchange rates of a doctoral, master's and undergraduate student to a standard student were 3:1, 2:1 and 1:1.

It should be noted that the unit which the worker worked for, *not his family*, held the funeral to mourn him. His family played only a participatory role. HUST would pay the bill for the funeral. This arrangement delivers a clear message that the worker belonged to the unit and HUST first, then the family. This idea was exactly the same as the collectivism in the Chinese clan system. Individuals belonged to the clan first and then their family. This tradition seemingly followed from Mao's suggestion. In 1944, a soldier died. Mao participated in the funeral and gave a speech. He suggested:

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A remaining question is: is it possible that HUST would cut off its social-service system in the near future, for instance, in the next decade? This question was presented to the president and the party secretary of HUST. They both considered that HUST should not cut off its social-service system in the next ten years. Instead, they emphasized that HUST should enhance its social-service system, rather than weaken it.

No doubt that it will probably take a long time for China to build a market system in which the transaction costs of social services will be lower than the administration costs in HUST's location. Thus, in the near future, HUST would keep, rather than cut off, its social-service system. Thus this system is likely to exist as long as it is able to provide lower-cost services for HUST.

This chapter described HUST's social-service system, particularly the health care, housing, child care, and care of the retirees. In studying HUST's social-service system, we saw three features.

First, HUST's social-service system is a major component of HUST's organization and thus the management of the social-service system is a major part of HUST's administration. This makes HUST a highly self-sufficient organization, closer to the Chinese traditional family and greatly different from the Western universities.

Second, HUST used its social services as a management tool to improve its performance. For instance, HUST used its social services to keep and attract capable people and link housing to individual performances. In this way, the management of the working side and the management of the living side are integrated. Thus, taking the case of HUST, it can be concluded that a study of Chinese university administration without considering the influences from the living side would be incomplete.

Third, there is a collectivistic vision which dominates the management of HUST's social services, which can be observed in the health care, housing, child care, and care of the aged. This vision can be expressed as: a collective should be obliged to take care of the needs of its members.

Finally, I discussed the originality and future of HUST's social-service system from a perspective of the new institutional economics. I concluded that HUST's social-service system originated from the drawbacks of social services at the location; and the social-service system was likely to exist as long as it could provide lower-cost services to HUST.

¹ I did not get the actual building cost of 1993. It should be noted that the construction system was a profit-making system. The land cost is excluded as all buildings were built on the campus.

² The name, work unit and date has been changed for anonymity.

³ The data was from the CCP General Office of HUST. All investments in this period of time is in the price for that year and in the new Renminbi system (for details see Endnote 12 in Chapter 8).

⁴ HUST had a total of 4,444 residence apartments in 1995 according the data from the CCP General Office of HUST. That is, HUST had at least 4,444 staff families on the campus in 1995.

Finance and the University-Run Industrial System

We have looked at some aspects of HUST's finances in the previous chapters. In Chapter 8, it was pointed out that 37-55 percent of the academic earnings were from the university's self-generated incomes. In Chapter 9, we saw that HUST adopted a collective vision in its social-service management and took the major responsibility for its social-service system and offered many benefits to its staff. All these created heavy financial burdens for the university. Moreover, HUST could not solve its financial problems through increasing its enrolment, as this was controlled by the SEC (see Chapter 5). Thus, HUST had to generate money to solve its financial difficulties. There were two major ways. One was to generate research funds by conducting research. The other way was to run an industrial system. This was a new activity for China's universities. It meant that HUST would integrate a new function into its organization. This raised a debate within HUST as elsewhere in China.

It is interesting to note that there is a profound divergence between HUST and its Western counterparts in dealing with their financial difficulties. In the West, if a university has financial problems, it tends to cut its non-academic functions and even unimportant academic programs and activities. But HUST took the opposite strategy: integrate more non-academic functions. This difference is very meaningful. I will address it from a perspective of the new institutional economics.

In this chapter, we first look at the shift of the government role in HUST's finance, then look at the plan of developing a university-run industrial system, finally the HUST internal financial management.

Shift in Government Funding: From a Major Role to a Minor Role

In the past two decades, the most significant change in HUST's finance was that the government's role changed from major to minor. The university self-generated income had become the major sources of HUST's revenue after 1990.

HUST had two financial sources: a government budget and self-generated income or "non-budget income (*yusuan wai shouru*). Each year, the SEC gave HUST three kinds of budgets: operational budget, capital construction budget and general research budget. The operational budget can be further divided into two parts: personnel expenses (*renyanjingfei*) like salary, benefits and daily operating expenses (*gongwufai*). The capital construction budget was for constructing new buildings and for expensive facilities (50,000 yuan or more). The general research budget was for general research activities related to teaching improvement. It did not fall within research project grants.

Before 1985, the operational budget was based upon a principle called "basic budget plus budgets for development. "Basic budget" referred to the previous year's operational expenses. It remained constant. If there were new needs, they were supported by the "budgets for development." The budgets for development depended upon the government's financial situation each year. As a consequence, universities tended to spend all their money in order to give the governments an impression that the government budget for operation was not enough. Universities needed more money, or at least, the same amount next year. Another consequence was that universities tended to increase their staff as the governments paid the staff expenses. Thus this budget approach was replaced by a new budget approach called "total student quota plus special subsidies." The SEC gave a budget measure unit called: "budget quota per standard student." The exchange rates of a doctoral, master's and undergraduate student to a standard student were 3:1, 2:1 and 1:1.

The total operational budget for HUST was arrived at by multiplying the budget quota per student by its total standard student number.

The budget principle for capital construction was different. Before 1985, if HUST wanted to buy a facility which was valued at 50,000 yuan or more, or build a building, HUST had to send a proposal to the SEC for approval. Then the SEC may have provided a special budget for the purchase. After 1985, HUST did not need approval from the SEC if HUST paid for the purchase. But if HUST asked the SEC to pay for it, SEC approval was necessary.

The general research budget was related to the type of university. Usually key universities like HUST received more than ordinary universities. Table 10.1 presents the percentages of the three kinds of government budget for HUST from 1953 to 1994.

Table 10.1 Government budget for HUST, 1953-94

year	operation	capital	research	total*	year	operation	capital	research	total*
53	23	77	0	10,762	74	77	21	2	8,056
54	38	62	0	11,118	75	76	21	3	7,860
55	52	48	0	4,957	76	83	16	0	6,655
56	56	44	0	5,655	77	79	19	2	6,903
57	65	35	1	4,806	78	69	27	3	11,651
58	82	13	5	5,016	79	58	39	3	17,776
59	72	22	6	6,817	80	71	25	5	17,100
60	58	15	27	12,903	81	77	18	5	17,844
61	81	10	9	8,715	82	73	21	6	19,332
62	83	15	3	4,676	83	72	22	6	23,696
63	87	7	6	4,855	84	72	22	6	28,699
64	97	0	3	5,385	85	72	25	4	35,750
65	94	4	2	5,706	86	68	28	4	39,852
66	96	2	2	5,104	87	64	32	4	40,206
67	99	0	1	4,351	88	68	29	3	39,565
68	96	3	1	4,072	89	64	32	3	43,764
69	100	0	0	3,275	90	65	31	4	48,220
70	98	2	0	3,215	91	76	20	4	45,872
71	100	0	0	4,454	92	70	24	6	55,195
72	77	13	10	5,825	93	65	30	5	68,038
73	79	18	2	6,583	94	78	17	5	79,996

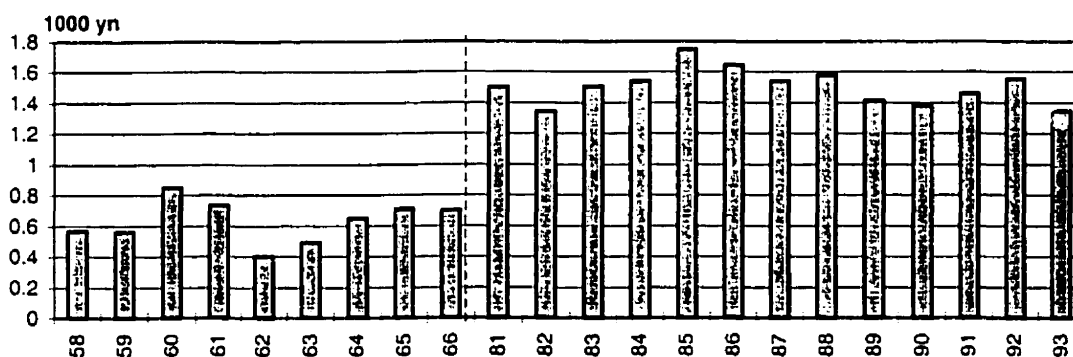
Source: Data from the CCP General Office of HUST

* The unit is 1,000 yuan in the new currency system (for detail see Note 12 in Chapter 8).

Except for the first five years of its establishment, the government budget for operations (GBO) was the major component, 80-100 percent before 1973 and 64-83 percent after 1973. After 1973, the capital budget grew to about 20-30 percent. The general research budget remained about 4-6 percent except for a few years. In other words, there had been a pattern after 1973: 65-75 percent for operations, 20-30 percent for capital construction and 4-6 percent for general research. Note that the change of budget approach in 1985 did not affect this pattern.

If taking the GBO per student as an estimate and calculating it at the 1952 consumer price index for living goods, one can see that the GBO per student doubled and even tripled from the 1950s to the 1980s. The data in the periods of 1958-1966 and 1980-1993 are presented in Figure 10.1. In the period of 1958-1966, the GBO was 400-800 yuans per student. In the period of 1981-1993, this number increased to 1,380-1,800 yuans. The budget reached its highest point in 1985, then generally decreased.

Figure 10.1 GBO per student, 1958-66, 1980-93 (1952=100%)*



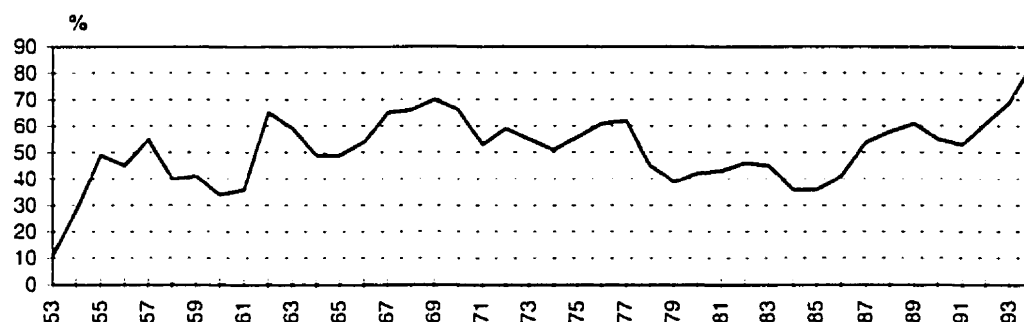
Source: Data from the CCP General Office of HUST

*The period of 1953-1957 was deleted because the consumer price index for living goods in the urban area was not available. The period of 1967-1979 was deleted as HUST was not fully operational in this period. The contract and self-funded students are excluded as the SEC's budget for HUST excluded these students.

Another indicator for estimating the GBO sufficiency is the percentage of the staff expense in the GBO. GBO covered two expenses: staff expense like salary, benefits and student stipends (see Chapter 8) and daily operational expenses like office expenses, library and low-cost facilities (less than 50,000 yuans). If the personnel expense increases,

the daily operational expenses will decrease. Figure 10.2 presents the percentages of staff expenses in GBO between 1952 and 1994.

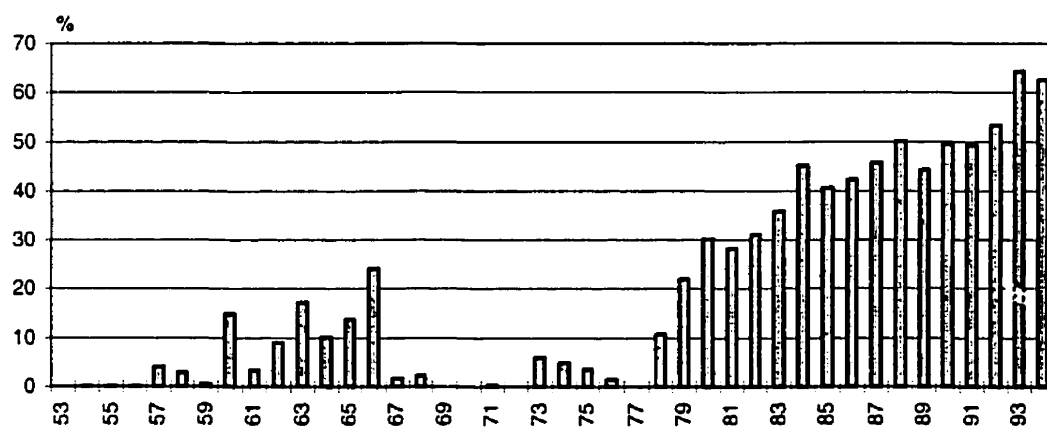
Figure 10.2 Percentage of personnel expenses in GBO, 1953-94



Source: Data from the CCP General Office of HUST

Clearly, in most years, the personnel expense was about 40-60 percent of the budget. However, this percentage broke the mark of 60 percent in 1992 and reached 84 percent in 1994. This created a crisis of insufficient funding for HUST's operations. So HUST had to generate extra income to maintain its daily operation. This is the reason that the self-generated income became important. Figure 10.3 presents the percentage of the self-generated income in the HUST revenue (the government capital budget was excluded) from 1953 to 1994.

Figure 10.3 Percentage of the self-generated income in HUST's revenue, 1953-94



Source: Data from the CCP General Office of HUST

Before 1978, the self-generated income was rarely over 10 percent of revenue. But after 1978, this income rapidly increased and in 1993 and 1994, it was over 60 percent of

revenue. That is, the self-generated income had replaced government funding as the major financial source for HUST's operation.

Therefore, in recent years, a debate has developed in China: should the university play a major role in generating extra income, or should the government retain its responsibility as before? Most of the colleagues in the Higher Education Institute, particularly the former university leaders, insisted that the government should be the primary supplier as a university is a public institute. Some current university leaders had a different opinion. They argued that we could not get enough money from the government, so we had to do something to survive and grow. Besides, that way HUST could do something good for both society and the university. The SEC obviously supported the latter, particularly encouraging universities to run high-tech industrial systems. Wei Yu, the Vice Chair of the SEC in charge of the university-run industrial affairs, made two points about this issue:

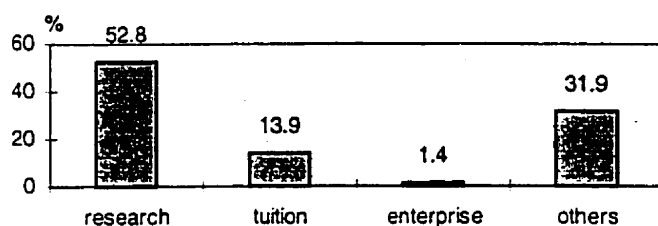
- “University-run high-tech/new-tech industry is a newborn thing that results from China's particular circumstance.”
- University-run high-tech/new-tech industry can not only directly transform university research results into products but also generate money to improve universities' financial situation (Wei Yu 1993).

Thus, HUST increased its university-run industry.

Developing a University-Run Industrial System

In the beginning, HUST ran some enterprises for teaching practices and services, but not mainly for the purpose of making money. So, these enterprises made less contribution to HUST's self-generated income. Figure 10.4 presents the percentages of the four kinds of the self-generated income in 1994.

Figure 10.4. Percentages of the self-generated income by sources, 1994*



Source: Data from the CCP General Office of HUST

Clearly the contribution from the university-run enterprises was insignificant. In fact, of the 135 million yuan of the self-generated income in 1994, the contribution from the university-run enterprises was only 1.94 million yuans. Thus, HUST planned to foster its university-run industry in 1996. Mr. Li, the CCP General Secretary, described this plan:

The basic goal and strategy for developing the university-run industry is to rely upon our major disciplines in the fields of laser, numerical control, communication, computer software, biotechnology, pattern recognition, and new materials. HUST will establish and enhance eight to ten major enterprises which are able to represent the academic strengths of HUST. Each of them is able to yield more than a product value of ten million yuan annually. To achieve this goal, [HUST] will strengthen the technological capability and competitiveness of its factories and companies, fully explore and optimize the potential capability of our various resources, combine industrial development with discipline development, and match our high-tech industry development with market needs and eventually build a middle-test and production base in order to transform our research results into products.

As to the management of these enterprises, we will apply an enterprise management system to them and separate them from the academic system. The enterprises should run independently. They should take their own financial responsibility and develop according to their goals. The university controls these enterprises through assets and acts as the owner in management of its industrial system.

Learning from the international experience, we will build a HUST high-tech park at Guannan Area [about 3 kilometers south of the campus]. The park will integrate R&D, training, consulting, middle tests, and production and become one of the major high-tech areas in Wuhan. We will attract all kinds of investments, intellectual and capital [to build the park]. We will also attract other enterprises into the park. These enterprises will rely upon our technology and products. Eventually, [our enterprise system] will be able to create favorable economic and social effects (p. 20).

This plan was approved by the Sixth Conference of the CCP of HUST and applied in 1996. This plan was also supported by Hubei Province and the SEC. Hubei Province assigned HUST land of twenty hectares to build a high-tech industry park for HUST. In 1995, the former Dean of the School of Mechanical Science and Engineering was appointed as the Vice President in charge of this task, then was appointed the President in 1997. Clearly, developing a university-run industrial system will be a major preoccupation for HUST in the next fifteen years.

According to this plan, the university-run industrial system will have many enterprises, initiated by HUST academics. These enterprises will conduct research, production, services and other commercial activities. HUST will invest them with land, patents and other capital; the enterprises will in turn remit profits to the university according to the university's shares. The main body of the technical management and forces will be the previous and current academics of HUST. The workforces may be made up of HUST students, graduates, family members, or be hired from outside. These enterprises will be located either on the campus, or in the high-tech park. The two major features of these enterprises are that they rely on HUST's academic force and that HUST is the major owner. In other words, beside its academic system and social service system, HUST is building its third major system: the university-run industrial system with a production value of 100 million yuan annually. This is the picture of HUST in the year 2010. As a matter of fact, several such enterprises were already established. A company which produces laser stick-

ers of trademarks had had a production value of eighteen million yuan in 1996 and planned to reach forty million yuan in 1997.

Now we encounter the same question: why did HUST adopt this strategy in dealing with its financial difficulties? The reason in my view is the same as the one explaining why HUST keeps its social service system while using the terminology of the new institutional economics. That is, economically, the transaction cost of selling HUST's research results to enterprises is higher than the administration cost when HUST runs its enterprises in order to transfer its research results into products. In the case study of the IMA echelon (see Chapter 7), Prof. Duan mentioned that they could manufacture their machines for industry as long as HUST's policies favor them. That is, HUST can make profits by running enterprises. If this system is profitable, HUST does not need to downsize and cut programs to solve its financial difficulties. This is the situation of HUST.

But the same strategy may not work in the West. Due to their advanced market and highly specialized labor division system, the administration cost is likely higher than the transactional cost if a university runs non-academic systems. So, cutting off non-academic functions is the basic strategy in solving financial difficulty there. In other words, both China and the West may develop their strategy based upon the same principle, but their outcomes are different. What makes this difference? The local situation in the two societies. Thus HUST did not tend toward a solely academic system, but toward a multiple-function-integrated and self-sufficient system. This is completely beyond the expectation of the 1985 reformers who tried to imitate the Western university model. As an old Taoist says, "things go in their own way."

Internal Financial Distribution: "Play as a Team"

The collective vision in HUST's management was also obvious in HUST's internal financial management but it showed another side, that the collective interests are supreme and individual interests should be subordinated to the collective interests. Let us

examine HUST's major regulations of the financial resource distribution regulations in 1995. For the academic system, they were:

- The university paid individual salaries according to the national unified salary system.
- The university gave each department, functional and academic, an operational budget.
- Teaching affairs departments paid teachers and support staff teaching bonuses and other teaching-related work bonuses from their operational budget.
- The tuition income from the regular students (about 80 percent of total students) was distributed to the university.
- The tuition income from the adult students (20 percent of total students) was distributed to the university (67 percent), functional departments (3-4 percent) and academic departments (30 percent).
- The tuition from training programs was distributed to the university (30-40 percent), functional departments (10-12 percent), academic departments (10-13 percent) and individual bonuses (30-40 percent).
- Research funds were distributed to the university (9.5 percent), functional departments (2 percent), academic departments (3 percent), research bonus (10-12 percent) and the rest used for research expenses.
- Consulting incomes were given to the university (20 percent), academic departments and individuals (80 percent).
- Money given to the university, function departments and academic departments was in turn used for capital construction, daily operation and staff benefits (HUST 1995f).

That is, HUST had complete control over the government budget and shared the self-generated income with subordinate units and individuals. And all of the government budget and about 35 percent of the self-generated income was controlled by the university. When calculating it with the data of 1994, the university-controlled part was about 60-63 percent of the total revenue. The financial power for individual departments was relatively weak. In my interviews with department heads, some wanted more power over finance. I presented their idea to a vice secretary of HUST. He commented:

We cannot give departments as much as they want. There are three reasons. First, HUST is in one of the crucial periods in its history. In such a situation, the university needs to centralize financial power to achieve its long-term goal. Besides, you can see that the departments which asked for more financial power are those that made greater extra income. It is true that they deserve a greater return for their contribution. In fact, they have had much more financial power than before. However, the contribution they made was not just due to themselves, but was also due to other departments and the university's support. Without this support, they could not achieve what they did. A principle for all university policies is: "play as a team" (*tuantisai*). This has been proved by our experience. Finally, we must control the individual earning gap. If this gap becomes too wide, it would have a bad impact on the university's stability and unity.

This comment clearly states another side of HUST's collective vision of management, that is, the collective interests are supreme over individual interests, and this has been expressed as "*play as a team*." If we combine this phrase with the one we mentioned in Chapter 9, complete expression of the collectivist vision of HUST's management would be:

A collective has the obligations to take care of the interests of both the collective and its members, but the collective interests are supreme over individuals'.

In fact, we have seen this vision many times in the previous chapters.

This chapter introduced HUST's finances in terms of sources and management; and its plan to develop a university-run industrial system. HUST had two kinds of financial sources: the government budget and the self-generated income. In recent years, the most significant change in HUST's revenue is that the SEC budget shifted from major to minor contributor, and HUST's self-generated income changed from minor to major. To

generate more income, HUST planned to establish a university-run industrial system with 100 million yuan of annual product value. In terms of organization development, it means that HUST will integrate a new system and become a university with three subsystems: the academic system, the support service system, and the university-run industry system. This will be the appearance of HUST in the year of 2010.

In its internal financial management, HUST controlled the major part of the university income and adopted a collectivist vision of management. This collective vision of HUST has been expressed as “play as a team” which emphasizes the collective interests are supreme over individuals’. Thus, a complete expression of the collectivist vision of HUST’s management is: A collective has the obligation to take care of the interests of both the collective and its members, and the collective interests are supreme over individuals’. This vision in my view dominated HUST’s administration.

The Party System: Its Role in Management

The theme of this final substantive chapter is the role of Chinese Communist Party (CCP) in HUST's management. In Chapter 5, we saw the party's role in student management and how the party recruited its members from the student body. In Chapter 7, Prof. Sun, the party branch secretary of the IMA explained how he did his job and his view of the party's role in management, which gave us an idea of the party's role in management at the ground-level. Chapters 6, 8, 9, and 10 contained examples which illustrate how the party supervised, controlled and influenced HUST's management in teaching, personnel, and social services. It is clear that the party had a profound influence on all aspects of HUST's management. It is not an exaggeration to say that the party is the cornerstone of HUST's management; one cannot understand HUST's management without understanding this system.

However, it is curious that HUST seems reluctant to present this fact in its image to the outside world. For instance, in the HUST internet homepage¹ created in 1997, all the presidents, former and current, were listed, but the party secretaries were either given an unimportant title like vice president, or omitted. That is, HUST presented only its academic side to the outside world. This would lead one to misunderstand HUST's management system. Therefore, in order to present a more comprehensive picture of HUST's management, this chapter focuses on the party system and its role in management.

This chapter has five sections. Section 1 is a general picture of the party members of HUST, while Section 2 describes the party membership and its influence on management. Section 3 is about HUST's dual administrative system: the presidential system and the party system and their relationship. Section 4 presents an interview with Mr. Li, the General Party Secretary of HUST (1984-1996), in which Mr. Li reviewed his career. Section 5 is analysis of Li's role in the HUST management.

The Chinese Communist Party at HUST: A Picture

The Chinese Communist Party is the cornerstone of HUST's management. But how did the party achieve this? The answer is: through the growth in members and the party membership. We look at the member growth in this section and party membership in the next section. Table 11.1 presents the numbers and percent of the party members from 1953 to 1994.

Table 11.1 Percentage and total party numbers at HUST, 1953-94*

year	academic %	non-acad. %	total	year	academics %	non-acad. %	total
53	N/A	N/A	N/A	79	35	28	1,520
54	3	5	43	80	37	26	1,598
55	6	10	88	81	41	22	1,715
56	15	16	207	82	39	28	1,868
57	15	15	215	83	39	27	1,932
58	14	11	221	84	43	27	2,047
59	15	28	326	85	42	32	2,255
60	22	10	491	86	43	32	2,427
61	27	15	668	87	48	30	2,610
62	25	22	634	88	43	35	2,766
63	29	22	640	89	47	33	2,741
72	29	22	866	90	49	31	2,769
73	26	21	890	91	55	28	2,817
75	25	31	1,132	92	48	33	2,887
77	36	27	1,367	93	48	33	2,938
78	33	28	1,430	94	48	36	3,044

Source: Data from the CCP General Office of HUST, HUST (1993, pp. 349-350)

* Data in some years were reported missing. The total column is the total staff party members. The student party members are excluded. The retired people were in the non-academics category (see Table 8.1).

Two things are obvious:

- The percentage of party members among HUST's staff was very high. For instance, at the end of 1990, the CCP had a total of 50,320,000 members in mainland China, 6.7

percent of the population over eighteen (“Zhongguo gongzhandang” China’s News, July 1st, 1991). But in the same year, the figure at HUST was 39 percent, 49 percent among the academics and 31 percent among the non-academics. This figure climbed to 41 percent in 1994, 48 percent of the academics and 36 percent of non-academics.

- The number of party members increased rapidly over the years, from 43 in 1954 to 3,044 in 1994.

Table 11.2 presents the number and percentages of the party members by the year they joined the party and the age distribution in 1994.

Table 11.2. The party members by the join-party year and age, 1994*

joint-party year	number	%	age	number	%
1937-1945	12	0.3	over 61	345	9
1945-1949	27	1	60-56	448	12
1949-1966	633	17	55-46	769	20
1966-1976	520	14	45-36	682	18
1976-1992	2,110	56	35-26	865	23
after 1992	463	12	25 or low	656	17
total	3,765	100	total	3,765	100

Source: Data from the CCP General Office of HUST.

* The number includes 721 student party members. They were rarely over the age of thirty five.

One can see that 68 percent of the members joined the party after 1976. Excluding the student party members (721), only about 800 staff party members were under the age of thirty-five, that is, 74 percent of the staff party members were over the age of thirty-five. Clearly, over the past years, Chinese Communist Party had constantly recruited members at HUST, particularly among academics. These members are the foundation of the the party leadership at HUST.

The Party Membership: A Dual life

The party members played dual roles at HUST: a worker role and a party member role. As a party member, they are required not only to carry out the party policies but also to be a “role model” for others. To ensure that party members played the role model well, the party members meet regularly at their branch. These activities are called “internal

party life" (*dangnei shenghuo*). Thus once one joined the party, one had a dual life, a normal life and an internal party life.

Selecting the "right" people to join the party was a constant task for the party. Generally, influential people who expressed a willingness to follow the party line were considered as prime candidates. At HUST, the party uses a five-step procedure to recruit members: informal application, formal application, party-constitution study, probationary membership, and formal membership.

First, one who wanted to join the party needed to submit a draft application in which s/he expressed a desire to join the party, giving reasons and a personal history. Sometimes a party member might encourage someone to apply for party membership. But by regulation, no one could be forced to join the party. After receiving an application, the party branch of the unit where the applicant worked discussed the application at a party meeting to decide if the applicant was qualified. If not qualified, the branch sent a member to inform the applicant about her/his weakness and how to improve. If qualified, the party branch gave the applicant a formal application form to complete. The person then became a formal applicant. Third, the applicant selected two party members from the party branch as his/her "joining-party instructors." The two members were responsible for helping the applicant to study the party constitution and to learn about party discipline. HUST had a "party school" which offered special courses for applicants. During this period, the two instructors reported on the applicant's progress at party meetings. The study period usually lasted one or two terms until most of the party members in the branch considered that the applicant was ready to join. Then, the applicant was invited to attend a special party meeting to discuss her/his application. At this meeting, the party members commented upon the applicant's strengths and weaknesses in front of the applicant. The applicant had the right to defend him/herself. Then the party members voted to receive the applicant as a party member, the vote requiring a two-thirds majority. Then the result was submitted to the general branch and the CCP Organization Department of HUST for final approval. Once approved, the applicant became a "probationary" party member. The

probationary period was a year. During this period, the probationary member enjoyed all the rights of party membership except the right to vote and to be voted into office. The branch continued its responsibility to help the probationary member to practice party rules and act as a "role model." If the probationer performed well, s/he became a formal party member at the end of the probationary period. The entire procedure, from the initial informal application to having formal party membership, took about two years.

A formal party membership gave three privileges to the members that affect HUST's management. The first was knowledge of "internal information." Internal information was different from published materials. Most published materials displayed either "positive" information or carefully modified "negative" information. But the internal channel delivered both kinds of knowledge. For the purpose of information control, the party established a propaganda department in all work units. This department controlled all media, collected all information and delivered it to different places, from the SEC to the school newspaper. The positive items went to open channels while the negative items went to the internal channels and became "party secrets." Due to the importance of this work, a vice-party secretary headed the propaganda department at HUST. In other words, the party maintained an internal information environment which provided information which is closer to "reality" than the "positive" information. Obviously this environment is important for decision-making (see also Hsiao & Cheek 1995).

The second privilege was "inner-party democracy" (*dangnei minzhu*.) All party members enjoyed two kinds of internal democracy. First, all party member had the right of free expression on *any* issue *within* the party and had a right to hold a minority view. This right was protected by the party constitution. In other words, the party promotes an *internal democratic environment*. Second, a party member had the right to go over her/his immediate head to send her/his opinion to a higher authority, even to the highest. This vertical-up channel was also protected by the party constitution. But all these viewpoints must be kept within the party. Leaking this information was a violation of party discipline. Thus this form of democracy was called "inner-party democracy."

Third, in many cases, a party membership became a prerequisite to become a leader. This was actually a consequence of internal information and inner-party democracy. If a non-party member occupied an important position, a managerial dilemma would occur. The non-party member did not have access to necessary decision-making information nor could s/he speak with those who had the information. Consequently, the party selected its members as the incumbents of important positions. For instance, in 1995, only one small department with twelve teachers was chaired by a non-party person at HUST.

The party exercised rigid control over its members through "inner-party centralization," which consisted of three principles:

- The minority submits to the majority
- Lower-level organs submit to top authority
- All members and organs submit to the central authority of the party.

This top-down control ensured that the party's policies would be carried out and the entire party acted in theory as a whole. Any violation of these three principles were punished and recorded on file. This is the meaning of "inner-party centralism." Combining inner-party centralism with inner-party democracy was called "inner-party democratic centralism." This was the salient foundation for administration in HUST as well as in other units in China. Unlike the government authorities that were centralized at some times and decentralized other times, the Chinese communist Party has not decentralized its authority since 1945 when its Seventh National Conference took place. One could fairly say that, this is the backbone of China's centralism.

The party institutionalized control over its members is through party activities. The party members of each branch met regularly, usually once every two weeks in the case of HUST. At the party meetings, members studied party documents. As well, they usually discussed their work, university affairs and social problems. Thus, party meetings were a place for party members to exchange information and express their opinions.

Comments, suggestions and criticism are very common and normal at party meetings. As most unit heads were party members, they inevitably discussed management issues. Thus, many management decisions were *actually initiated at party meetings*. It should be noted that all heads attended the party meetings as *ordinary* party members. This gave the non-head members opportunities to influence unit affairs.

It goes without saying that party membership did have a pervasive impact on the party members' behavior. A young officer who was accepted as a probationary member in the early 1995 described his first experience at the party meetings:

I was surprised when I first attended party meetings. All members of my branch met together. All department heads attended the meetings and sometimes school heads came to join us. Everyone had the right to express himself and criticize others. People were seemingly equal at these meetings. These people criticized everything, from the party and government policies to corruption and social problems to the school and department affairs. If the school heads attended the meetings, some members challenged them on school policies. The school heads seemed much nicer than usual in response to these challenges. They politely explained their difficulty with detailed information and they sometimes even complained. It was not like at work where people take care of "face." At the party meetings, the members directly criticized each other and defended themselves. Some criticism was so sharp that you could not hear it elsewhere. I guess this is the reason why they pay attention to "face" at the work as they have another place to speak out. Also at these meetings, you could learn internal information about the coming policies, stories about political scandals or important events. This is important in understanding the current situation. But, at these meetings, I realized that it is not easy to be a party member because I have to discipline myself.

In this way, the party had successfully made itself the most powerful political organization at HUST.

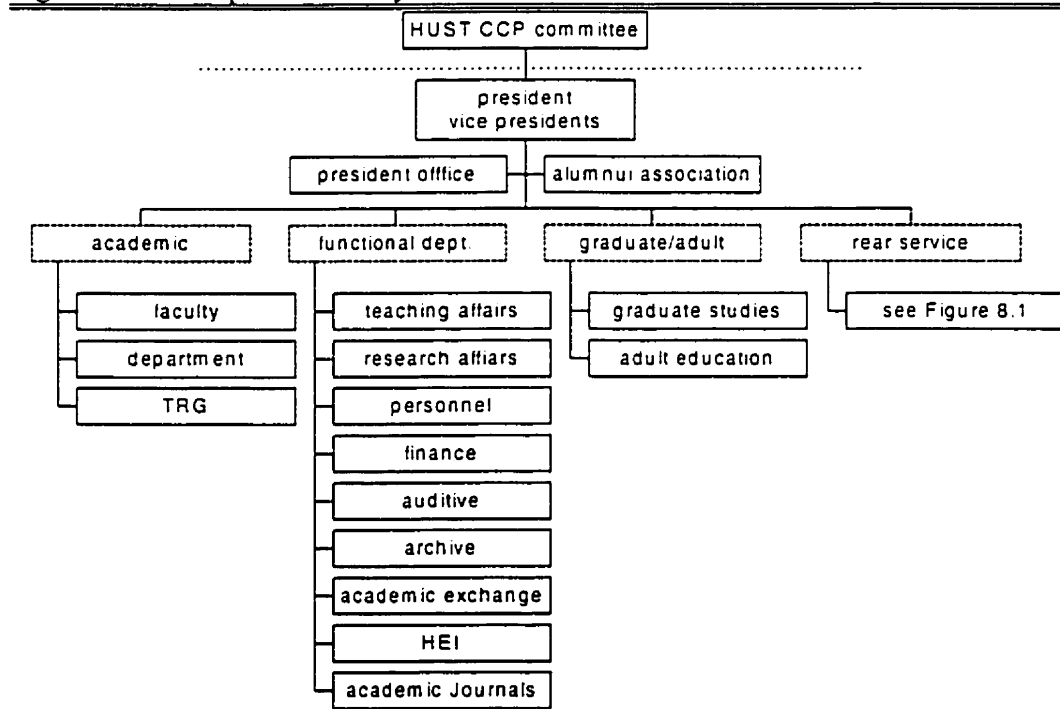
The President System and the Party System: Parallel and Integrating

HUST had actually two administrative systems. One was the presidential system which was headed by presidents, called the “operating (*xingzheng*) system.” The other was the party system which was headed by the party secretaries, called the “party committee (*dangwei*) system” or simply the party system. They were parallel and existed at every level of HUST. What are the functions of each system and how do the two systems cooperate?

The Presidential System

Figure 11.1 presents the presidential system:

Figure 11.1 The presidential system of HUST, 1995*



Source: Field notes

* The part below the dotted-line is the presidential system.

The presidential system had four presidents, the president and three vice presidents. The president was in charge of overall issues and he had an assistant to help him in teaching affairs. Three vice presidents were in charge of daily operation, research and school-run industry, and rear services respectively.

The academic system had four levels: university, faculty, department and TRG. As to faculties and departments, HUST had two models. One was called the strong faculty model, the other was the strong department model. For a strong faculty, all daily operational offices, e.g., teaching management, student affairs, social services, finance, and personnel, were located at the faculty level, that is, all daily operational administration was located at the faculty level and its departments became academic, mainly focusing on research and teaching. For a strong faculty, its general party branch was located at the faculty level.

For a strong department model, all daily operational administration was located at department level and the faculty level was weak. The Faculty of Science was an example of this. The faculty had three departments, mathematics, chemistry and physics. No operational offices were at the faculty level. The faculty did not even prepare an office for the dean. But the three departments had their own operational offices, their chairs had offices at their department. For these faculties, deans actually functioned as the representatives of their departments. The general party branches were located at department level. Thus people judged a faculty strong or weak by the location of the general party branches. This criterion clearly shows the importance of the general party branch.

Why was the location of the general party branch so important? Because the party secretaries were deeply involved in management. At HUST, much of the daily operation and non-academic affairs were located at department or faculty level. Dealing with daily issues required considerable time and energy. However, most deans and chairs were academics. They usually took their administrative role as a part-time duty and reluctantly spent time on it. It was difficult to find them in their office. This left "administrative space" for the party secretaries because most of them had no or few academic duties. They were always in or around their department and were easily located. Thus, daily operational duties, non-academic affairs and sometimes even academic duties gradually came under control of the party secretaries. For instance, HUST expected the party sec-

retaries to attend meetings on academic affairs if deans or chairs were not available. This occurred many times during my fieldwork. Thus, these party secretaries played a major role in faculty and department management.

TRG was an academic unit. A typical TRG had a head and/or a vice head in charge of teaching affairs. Each of the TRGs had a party branch. But all party secretaries at the TRG level were academics and took their party duty as part-time duty. Thus in general the academic head had more influence on TRG affairs.

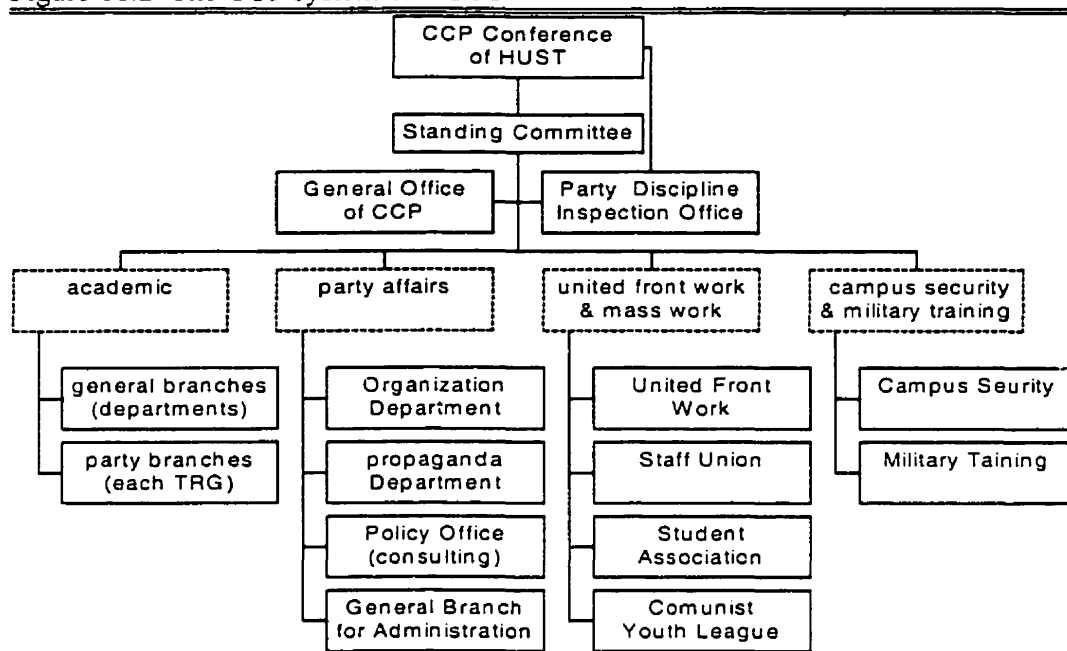
The units in the functional section were all administrative departments. Each department had a director and one or two vice directors. Each department had a party branch. All these branches were supervised by a general party branch, called "General Branch for Administration" The party branches in the social-service system, faculty of graduate studies and adult education school were also under this general branch. Thus, it was the largest party general branch at HUST.

The Party System

The Party system had four sectors: the academic, party affairs, the united front work and mass work, and the campus security and military training. This system had three levels, too, which was parallel with the presidential system.

At the university level, the party conference was the highest authority. This conference was held once every five years before 1996 and four years after 1996. It selected two standing committees, the University Party Standing Committee and the University Party Discipline Inspection Committee, to operate during its adjournment. The first was in charge of daily operation and the latter was in charge of the maintenance of party discipline. They both were supervised not only by the school party conference but also by the party committees of the province and the SEC.

Figure 11.2 The CCP system of HUST



Source: Field notes.

The University Party Standing Committee, or “the university party committee”, had nine members in 1996, the university party secretary and three vice party secretaries, the president and three vice presidents, and the chair of the University Party Discipline Inspection Committee. The university party secretary chaired this committee. As to the three vice party secretaries, one supervised the organization department, the general party office and the policy research office, one supervised the propaganda department, the united front work office and the staff union, and one supervised the student association and the Communist Youth League, the campus security, and military training department. As all the heads of the party system and president system were on this committee, it was actually the *highest* authority of HUST in its daily operation. It provided a place for all university heads to work together.

General branches were the second level. A general branch usually had three secretaries, a general-branch party secretary and two vice secretaries, one for students affairs and the one for staff affairs. They acted as assistants of the general secretary. A general branch also had a party standing committee. All general-branch party secretaries, deans or chairs were committee members. The general-branch secretary chaired the committee.

This made the general-branch secretary a major figure in the faculty/department administration the same as the dean/chair. Thus, cooperation between the two heads was crucial for faculty or department administration. It was said that: "A unit can run well only if the two heads cooperate well."

The party branch was the third level, either located at the TRG level in the academic system or at the department level in the other systems. Each party branch has a party conference. This party conference selects one secretary from among its members. As most administrative issues at TRG are related to academics, the party secretary has less influence than the academic head. But cooperation between two heads is still important as was shown showed in the IMA echelon (see Chapter 7).

The party affairs sector had four functional departments: organization, propaganda, policy research and the party school. The organization department was in charge of selecting, recommending and training the heads at TRG and department/faculty level and the recruitment of party members (see also Yan Huai 1995). The propaganda department controlled all media and was in charge of information collection as well. The policy research office was a consulting body. The party school was a training place which offered courses for the probationary party members and organized workshops for certain party members like middle-level heads and professors. The university party secretary was the principal of the party school.

The mass-work/united-front-work sector actually had two parts. The mass-work part included the staff union, the Chinese Communist Youth League (CCYL), and the student association. The staff union was an association of HUST staff. Its official mission was to represent the interests of HUST's staff. But in practice, it cooperated with the party, never acting as an opposing force. The CCYL and student associations were student organizations. The united-front-work part was a place at which the CCP heads consulted the other five small political parties on HUST's affairs.²

The campus-security/military-training section were actually two separate departments. The two departments were introduced in Chapter 5 and Chapter 8 respectively. As a convention, the party solely controlled all armed forces in China, thus these two departments were under the supervision of the school party committee.

This party system had four organizational features:

- The party system was parallel with the presidential system. A party branch was situated in all units at all levels. In 1994, HUST had a total of 32 general party branches and 314 party branches. Through this system, the party is connected with all its members
- All links among the party organs were vertical, not horizontal. This design was consistent with the principle of “inner-party centralism.”
- This system was activated by regular party meetings. Information exchanges in this system was much more fluent than any other system at HUST
- Party discipline was stricter than administrative regulations. A professor might not take administrative rules seriously but had to take the party discipline seriously as a party member.

These organizational designs ensured that the party system controlled the presidential system. In addition, all party secretaries were assumed to interact with people and to solve their problems, particularly those involving their living arrangements. This “charity role” was called “caring for the masses’ life.” This role made party secretaries deeply implicated in people’s lives. The concerns arising this role in turn influenced their decisions.

Relationship between the Two Systems

Clearly, the two systems had their own foci and concerns. The presidential system focused more on academic functions and social-service systems, while the party system focused more on the party line, overall policy and the affairs relating to people’s lives. Thus, heads in the two systems stressed different factors in decision-making and conflicts

between the two systems were inevitable. A common issue was, “Who should have the final authority, the party heads or the academic heads?” The party, in an attempt to resolve conflicts, had reordered the two systems five times since 1950.

Between 1950 and 1956 the presidential system was in charge. After 1956, the party system was given the final authority. In 1985, reformers launched an experiment which gave the presidential system the final authority and the party system played only a supporting role (see also Hsiao Pen 1995). The Tian’anmen event changed the situation as it was viewed as a consequence of the weakened party system. Thus the SEC stopped the experiment in 1991, and the central authority of CCP officially dismissed it in 1996 (“zhongguo” China’s Educational Daily 1996 April 16 p. 1). The experiment was failed.

But in practice, the heads of the two systems were encouraged to cooperate rather than to act restrictively according to official rules. This effort was seen as “two brothers playing as friends (*geliang hao*).” The capacity of cooperation became an important criterion in the selection of the heads. That is, those who were able to cooperate with others are likely to be promoted. Specifically, it was decided that all heads were to be party members thereby being included in the party committees. Thus, both heads actually participated in decision-making on important issues. In short, the party expected to solve the conflict problem by promoting partnership between the two systems. Now the reader may want to know how a university party secretary does his/her job? This is a central concern of the following interview with Mr. Li, the Party Secretary of HUST in 1984-1996.

Work as the Party Secretary of HUST: Interview with Mr. Li

Mr. Li, born in 1931, entered Guangxi University in 1951, studying mechanics. He was transferred to HUST in 1954 and joined the party in the same year. After graduation in 1955, he remained at HUST as a teacher at the Department of Mechanical Engineering. From 1955 to 1960, he was mainly on the academic staff, but had worked as the chair of the staff union of the department, as a general secretary of Chinese Communist Youth League and as a party branch secretary at the department. From 1960, he was pro-

moted to a vice department chair (academic) and a vice general branch secretary and worked in three different departments. During the Cultural Revolution (1966-1976), he was dismissed from all positions. After 1976, he was appointed as a vice chair, chair and then the general branch secretary of the Department of Mechanical Engineering. In 1984, Mr. Li was appointed by the SEC as the university party secretary. He retired from this position in 1996. As HUST did not apply the presidential responsibility system in 1985, the university party committee was actually the highest authority at HUST.

During my field work, I interviewed Mr. Li three times, once in May, which was a get-in-touch interview as I did not have a personal connection with him before, once in September, which was a kind of “warm-up” interview. A third interview was conducted in December, on a Sunday morning at his office. This was a good time for the interview. We did not need to be concerned about time or with interruptions. Besides, Mr. Li was going to retire in June, 1996. It was a good time to ask him to review his work and life at HUST, particularly how he worked as the university party secretary. This interview lasted three and a half hours. The interview involved many topics regarding HUST’s administration and many points he made have been cited in the previous chapters. Thus, this section concentrates only on how he viewed his role as the university party secretary. I asked him to review his entire work and life first. He told of two events that greatly influenced his later work style.

Li (L): In the early years [of Communist China], I had not many ideas about communism. But at that time, the popular topic of discussion was: who exploited whom. In cities, I saw the rickshaw men and knew they suffered. After entering Guangxi University, I participated in the land reform.³ That taught me a lesson about China. The village I worked in was located in a remote mountain area. We were students. But the poor peasants treated us warmheartedly. All members of the land-reform team were required to live with peasants. I lived with a young peasant. His living conditions were unbelievably bad. He had nothing except a bed and a few farm tools. Under his bed, it was a pigsty, very smelly. I could not fall asleep for the first few days. His blanket was too dirty to show the

original color. We ate rotten sweet potatoes every day. The area had many bandits, but we had no gun because we were students. So when we went to visit the local government, we shouldered an umbrella as it looked like a rifle. One day, we came back late. It was dark. Another student and I panicked when we passed by a bandit-active area. Suddenly, we saw torch lights and heard some one call our names. The peasants came to meet us because they were afraid we had trouble. We were so touched. I remember that we both cried. After that, I began to understand China, the peasants and the importance of the integration of intellectuals with workers and peasants. But the most important thing I learned was that one should care for others.

[The second was] about the Cultural Revolution, I was attacked in the period. But I never haggle over these attacks later. Why? I thought, the Cultural Revolution was initiated by Chairman Mao. As a party member, if I were not attacked by others, I would attack others. This was the situation. Before the Cultural Revolution, I carried out ultra-leftist policies, while in the Cultural Revolution, I suffered from the ultra-leftists. If I did not have this experience, I would not understand what “being attacked” meant. After that, I changed greatly. I remembered that Mr. Zhu Jiousi [the university party secretary and president in 1961-1984] once asked me if I was scared by the Cultural Revolution.

Zhao (Z): He asked you this?

L: Yes he did as he saw that I was much “softer” than before. But I have my concerns. I deeply share Deng’s idea of creating a better working and living environment for intellectuals. This actually was the priority in my two terms as the party secretary. I changed my work style, too. No doubt, as a university leader, you have to implement the policies from the top. But you must fully understand that these policies are general principles. They may not be suitable to HUST’s situation and may cause negative effects for the university. If you blindly carried out these policies, you may hurt people and not even know what you did. For you, it is routine and you may forget it quickly. But for the people who were hurt by the policies, the pain may last a long time. I give you an example.

In 1981, a teacher in the department I chaired was going to transfer out. Before he left, I asked if he had any dissatisfaction with me. All my life, I never lost my temper with any staff member. But the teacher said: “I do.” I was surprised. “What?” “In 1961, you

organized a meeting to criticize me.” After he told me what occurred during the meeting, I recalled it. It was an academic meeting. He presented a paper, but some teachers disagreed with his opinion and a debate occurred. In my view, it was a normal academic debate. But he considered that these teachers tried to put him down, and I was the chair of the meeting. However, he did not tell me this. Instead, he hid it for twenty years until he was going to leave! I felt very sad and said: “You should have told me this immediately.”

Later I returned this event many times. It seemed hard to understand. But if you take his living circumstance into account, it would be understandable. If his life went smoothly, he might have treated the debate as normal as I did. But if he always lived in a depressing environment, he would become nervous and negative. Unfortunately, this was the environment we had, particularly before 1978. If one’s work environment is always depressing, how could you expect one to be pleased and open to you? This has to be changed. We should do something to make people enjoy working and living here.

As to my work style, I moved from one position to another, and did many different kinds of jobs. This gave me broad knowledge and experience about university work. These experiences were very helpful and become reference points for my work. I did not follow anyone blindly. Instead, I sought reasons. As a university head, the most important thing is to make judgments about situations: what is the country’s situation and what is the university’s situation? I rarely read the documents word by word. Instead, I skim them to find the parts relevant to HUST. Once grasping these points, I develop my ideas and use them to guide the university’s work. If you cannot convince people why a policy is relevant to HUST, you simply cannot move them. I always say that the duty of the party committee is guidance, the duty of presidents is implementation. Thus, at the annual university work meetings, I always make the focus for HUST on its direction and basic tasks for that year.

Z: What about the policies that you consider not relevant to HUST?

L: They may be relevant to other universities. Another experience is about how to use cadres [administrators] properly. I have two principles. First, the work relationship is an organizational relationship, never take it as personal. Let me give you an example. In 1985, the previous director of the Organizational Department was involved in a political

scandal. Some people who were dissatisfied with him came to me and pointed out who were his fellows. I told these people: "First, if you are sure that someone did something wrong, write me a report with evidence; and I will conduct an investigation. Otherwise, sorry, I can do nothing for you. Besides, you should keep in mind that all cadres are the party's asset. They are not someone's "fellows." Your way of viewing cadres is definitely wrong and extremely harmful." Later, I did not receive any report.

The second principle is "use cadres on their merits (*yongren weixian*)". Most of our cadres have good political qualities. So, what is "merit"? To me, the most important sign of merit is the capacity to do a good job. I select and appoint cadres according to this principle. But I have to say that I do have a fault with the cadre personnel. The average age of HUST's cadres is high. [Note: since 1985 the central authority of CCP has tried to promote young cadres to leading positions to support the reform. This policy was coined as "cadre youthization."] I should take this responsibility.

Z: Why?

L: The primary reason was my reluctance to hurt people. The secondary reason was that we had not enough positions. It is said, "one carrot one hole." The dilemma was where do you put the senior carrots if you replaced them with young carrots. I presented my dilemma honestly to the university party committee. I argued that people were not a shirt that you could put on when you need it and take off when you did not need it. They were people. They had thoughts and feelings. If I replaced the seniors with the young, the young cadres would be happy for sure, but what about the senior cadres? How would they feel? If they felt like losers, how could you motivate them later?

Z: It was a dilemma.

L: Yes. It is another part of the Chinese character. In the West, I need not be concerned about this. If I need someone, I hire him; if I do not need someone, I fire him. But this way does not work in China. The personnel institution is crucial for any organization. China has neither an unemployment security system nor a social pension system. As a result, work units have to take care of everyone. We cannot lay off anyone except those who violate the law. Our socialist system is to give people a rice bowl. You must guarantee their work and life. Whether you need them or not. They are yours. For instance, I

know that the Western universities have a rule called: “up or out.” It cannot apply in China. Thus, we have a special problem of how to motivate people in our situation.

Z: What did you do?

L: By improving the working and living conditions and by the party system. For instance, in the past ten years, we paid great attention to improving our social-service system. Ten years before, HUST had a serious housing shortage. So, we built many residences. The problem was solved now. Then we invested greatly in our kindergarten, primary and middle schools. Third, we gave the staff’s children either an opportunity for higher education or a job after they graduated from middle school.

Z: How much time did you spend on these things?

L: It is hard to estimate. But in general, you must keep these things in mind. For instance, whether the university reserved enough coal for winter, whether the foods sold on the free market were too expensive, whether students were satisfied with their dining halls. If the water supply was broken, I had to go to student dining halls to help them solve the water problem. All in all, if an incident occurred, I had to be there. Even if nothing occurs, I need to walk around to ensure that everything goes well. Once the library complained that I did not care enough about them. It was true. But why did I care for less the library? Because I put much of my time on social services. As the party secretary, I have one “fear.” I am afraid of incidents. If students cannot have meals on time and make noise, or if someone posts a criticizing poster on the campus, the top authority will be immediately informed and I would be criticized. HUST is a key university; it has a strong influence and predominate. Thus, for me, the most important thing is keeping everything going well. The presidents are less concerned about these issues.

Z: Why?

L: HUST applies the party committee responsibility system. Thus, if any accident occurs, the top looks for the party secretary, not the president.

Z: It is interesting. Why do we need two systems? Could we integrate the two into one?

L: This is related to the entire political institution of the state. Universities alone cannot change it. And it is not a good time to implement any change. As to whether we will keep it forever, no one can predict. By its nature, this issue is political rather than administra-

tive. It is clear that both the West and China face similar problems but we deal with them in different ways. In contrast to the West, our law system and administrative rules are far behind. We cannot completely rely on them. Thus, we need a system to hold all sides together, to cooperate and unite people.

Z: Some people criticize that decision making at HUST is slow and you are responsible for this. What is your opinion about this criticism?

L: My principle is that for an urgent issue, you have to make a quick decision. But decision-making in university settings is rarely urgent. It is not like decision-making in business circles, where if you do not decide quickly, you may miss opportunities. Besides, if you reach a consensus in decision-making, you will save time in decision implementation. Third, mutual understanding is extremely important, particularly in university settings. You should not rush. If you push too much, you may destroy the common ground of mutual understanding and cooperation.

Z: So, in your view, a decision should not be made until a consensus is reached?

L: This is my way. I rarely force people to do what they are not ready to do. At the university party committee meetings, I disagree with using a vote in decision-making. If we cannot reach a consensus on an issue, I will adjourn the meeting and exchange ideas individually with people who have different opinions. When we have an acceptable scheme for all, I submit the issue to the committee for decision-making. More important, as party secretary, my duty is to unite the leading group and support all leaders in doing their jobs. I may give presidents suggestions, but I would not force them to accept them. If they disagree with me, I have to convince them. In fact, I never meddle in their business. This sounds far from the “[party] centralization (*yi yuan hua*).”¹⁴ Thus, some people criticize me for “mortar-making (*huo xini*).” (In Chinese it means “smoothing things out.”)

Z: What is the difficulty for you?

L: This also relates to China’s context. At HUST, leadership at all levels does not rely on personal power, but mutual understanding and mutual support. If we are mutually supportive, things will be done easily and the university will progress well. If the leading group splits, the university will have troubles. Therefore, it is worth it to take time for leaders to reach a consensus. It is slow but better than stopping or having a setback.

Z: Do you think it is good practice?

L: I am not sure if it is good. But I am sure that the presidents and party secretaries must cooperate and mutually support each other. If at a university meeting, a president presents an idea with which I disagree and I immediately shoot it down, how does the president feel, how could he step down? Thus, the only way is for me to adjourn the meeting and exchange ideas with the president privately, and let him adjust himself if he considers my opinion more reasonable. In China, we do not have as many operational rules as the Western universities do. People are not used to following those we do have. So, "ruling by man (*renzhi*)" is very common. In such circumstances, you will have trouble if you reject mediation. Once I told the Chairman of the SEC that I knew I was criticized as a "mortar-maker." It was true. But if my cement could stick all the bricks together, why not, as long as I did not sacrifice principles? It is normal that people have different opinions. So, we need a person to bring these opinions out and eventually unite people. This is the duty of a party secretary. For instance, we will discuss the duty division of the new party committee this afternoon. Thus, recently I consulted all university leaders, past, present and new, one by one, then I developed a proposal for the committee discussion. It takes time, doesn't it?

Z: So, your opinion is that as we do not have a well-established legal/regulation system, "ruling by man" is common. In such a context, cooperation among all leaders is crucial and the party secretary should take this as a major duty, am I correct?

L: Yes. But the term "rule by man" means that the influence of individual opinions and viewpoints are visible in management. It does not mean rule by one person. This is justly called a "collective leadership (*jiti lingdao*)."

In short, I work to promote an environment in which people work as they want, not as they have to. There is an ancient Chinese saying, "harmony is precious (*he wei gui*)."

Perhaps I was influenced greatly by these Chinese traditional thoughts. But I think these ideas are still valuable.

Z: What is the future of the party system?

L: Maybe, after this phase, ["the initial phase of Chinese socialism" which was defined by the CCP in 1984] the party system may not need to involve this operational administration and might pay more attention to fundamental issues like direction issues. But during

this phase, the party system still needs to do much administrative work. Thus, the party is a political organization, yet it basically functions as a management organization at the ground level, at least at HUST. Its major task is to create a harmonious relationship among the party system, the presidential system and all people. Through its work we are able to unite people toward a common goal. Is this a Chinese characteristic? (*smile*)

Z: What is your contribution to HUST?

L: All the work is done by all staff at HUST, not by me or other university leaders. As to HUST's changes, I would like to say that the previous leaders built a broad stage and we presented a play, or, the previous leaders made a good structure and we fill it as best as we can. In my two terms, HUST improved its academic quality, its working and living conditions and its collective leadership. Indeed, after twenty years hard work, HUST has changed greatly.

After this interview, he helped to select the new party committee members and draft a new Five-Year plan for HUST, then he retired in June of 1996.

A Discussion of the Interview

This interview was designed to probe the university party secretary's role in management, including career path, policy making, implementation and cadre control, major duties, and work style.

Career path. It can be seen that his career was changed between the presidential system and the party system. He started his career as an academic staff with some party work, then a part-time academic administrator, a part-time party worker, an academic administrator, and finally a full-time party worker. That is, in terms of personnel, there is not a strict line between the party system and the presidential system. As a matter of fact, such switches were very common, particularly at the TRG and department levels. The career path of Mr. Zhu is another such case (see Chapter 3). Mr. Zhu once commented, "A party secretary needs knowledge of all aspects of the university. Otherwise, s/he could not be a good leader." Clearly, these switches gave Mr. Li a rich experience before he was ap-

pointed as the university party secretary. In contrast, the presidents of HUST were more professional. Most of them had less party work experience.

Policy making, implementation and cadre control. It is interesting to notice Mr. Li's view of government policies. Mr. Li considered the government policies as general principles and read them as guidelines, not as operational rules. He interpreted these policies according to his understanding of the situations of the country and HUST, and only implemented those he considered relevant to HUST and omitted the rest. In other words, he decided what policies should be carried out at HUST and what should not, what were the proper ways to implement the government policies at HUST and what were not. In this way, he became the crucial person in government policy implementation at HUST.

It should be noted that it is a pattern that Chinese governments write most of their policies as general principles, not operational. They allow their subordinate units to implement these policies according to their individual situations, which is termed as "making concrete analyses according to the concrete situation (*juti qingkuang, juti fenxi*)."

This style makes the relationship between governments and their subordinate units a guiding relationship, and heads of the subordinate units become the key people in policy implementation. Therefore, the selection of heads or cadres is crucial if the government wants to ensure that its policies were *properly* implemented. Mao noted this and clearly commented in 1938:

Cadres are a decisive factor, once the political line is determined. Therefore, it is a crucial task to train large numbers of new cadres in a planned way (1967b, p. 160).

This is the reason that the party system holds the authority of cadre selection and training, and this is named: "the party controls cadres issues (*dang guan ganbu*). In general, only the persons who are considered loyal to the party and have learned well how to read and implement the top policies can hope to be promoted to top positions. Clearly, as the authority of policy-making is centralized and the authority of policy implementation is

decentralized, the party needs to control the persons who are in charge of policy implementation. This is the ultimate reason that the party needs to control cadres.

However, this mechanism is a primary cause of "ruling by man." If the heads of subordinate units are given an authority to change these policies according to their understanding of their particular circumstances, they will put their personal slant on government policies. In other words, "ruling by man" is a consequence of centralized policy-making and decentralized policy-implementation. From this viewpoint, one can expect that the heads of subordinate units do have a strong influence on their unit affairs. It should be noted that this is different from local autonomy in many Western societies, wherein a local community "owns" the delegated authority on both policy making and policy implementation from a central authority. In contrast, in China, a subordinate unit does not have such control of its affairs. Also note that this mechanism, i.e., centralized policy making, decentralized policy implementation and cadre control, is not an invention of the party, but one that has been practiced in China for thousands of years.

Major duties. As the party secretary, Mr. Li performed four major duties:

- Guide and supervise HUST in a given direction and maintain progress
- Create a favorable working and living environment.
- Maintain collective leadership at the university level
- Supervise the party affairs.

Fulfilling these duties, Mr. Li became the major leader of HUST. As he mentioned, he, rather than the presidents, would be blamed by the top authority in case an accident occurred at HUST. Also, under his leadership, HUST stopped the numeric extension and turned to quality improvement (see Chapter 3).

It is interesting to note that Mr. Li was particularly interested in "creating a favorable working and living environment." He took it as one of his major duties. He spent considerable time and energy on it and he took pride in what he did. Professor Sun, the

IMA party branch secretary, did similar things. Thus, we can see this as a pattern; that is, party secretaries take care of the issues from the living side. In the party terminology, it is called “care of the mass’s life (*guanxing qingzhong shenghuo*).” Through this duty, the party wins favor and supports from the masses, thus it is essential for all party secretaries. To be “careless about the mass’s life” is a serious defect for a party secretary.

This duty is related to the organizational form of HUST, that is, HUST is a working/living community. If HUST becomes a pure workplace, this duty will disappear. What would be the new duties for party secretaries and how would the party ensure support from the mass at micro level? These will become new challenges for the party if the *danwei* system is dismissed.

Work style. An obvious feature of his work style is that Mr. Li insisted on avoiding conflict situations. This can be extrapolated from three things. First, Mr. Li disliked using the *vote* as a measure in group decision-making. Instead, he would adjourn the process if opposing opinions were raised. Then he preferred to exchange opinions with his opponents privately until they reach an acceptable compromise and only then present the idea for decision-making.

Is it unusual that the vote was rarely used in group decision-making? I presented this question to more than twenty department and university heads. They responded with “No”, except one. A formal university leader told me that “In fact, at HUST, a vote was only used on two issues: academic promotion and party secretary selection.” The reason they gave for their answer was similar to Mr. Li’s, that is, a vote was a measure that seems to force people to do what they were not ready to do and might split the group. This would cause more trouble in future decision-making and decision implementations. Thus, the safest way was to persuade the minority to accept the majority’s opinion and eventually reach a consensus. In other words, individual influences and/or group pressure were the major tools used to reach a consensus in decision-making. The person who responded with “yes” commented: “I prefer a vote because it makes the decision-making

process simpler and faster.” When I asked: “Do you consider the consequence if the minority feel like losers and may resist the decision in its implementation?” He said: “We should not take it personally,” but people do. This issue of the vote actually raises a question about organizational culture of decision-making, that is, which kind of organizational culture will favor the vote as the major tool in decision-making, and which will not. From my survey of the heads, one can see that the vote was not favored at HUST.

Second, Mr. Li was criticized for “mortar-making.” But he argued that as long as his cement could stick all the bricks together, mortar-making should be acceptable. Furthermore, he considered his style was helpful in maintaining a collective leadership.

Third, Mr. Li considered that it was his fault that he did not promote enough younger administrators. This resulted because he wanted to avoid a conflict with the interests of the senior staffs.

Mr. Li summarized his work style with a well-known Chinese aphorism: “harmony is precious”, and argued that it was “valuable.” It was completely different from the common work style of the party secretaries in the period of 1949-1978. In that period, political attacks were favored in the name of “the class struggle.” A party secretary of another key university commented: “We have learnt a lot from the past. We should pay more attention to people’s needs and make them happy. This is the right way to do our work and the only way to win the masses’ favor. If we always attack them and make them nervous, eventually we will lose them.” In short, the party secretaries like Mr. Li had changed their work style from political attack to social harmony. This was a significant change for the party secretaries after the Cultural Revolution.

This chapter describes HUST’s administration system, particularly focusing on the Chinese Communist Party’s role in management.

As we saw, the party practices its management role through its members and the party membership. In the past years, the number of the party members at HUST grew rapidly from 43 in 1954 to 3,044 in 1994, and the percentage of party members in academics increased from three percent in 1954 to forty-eight percent in 1994. The party provided some privileges i.e., internal information, inner-party democracy and more chances for its members to be promoted to middle or high level positions and also controlled them with party discipline. All the party members are required to keep in contact with non-party people and become a role-model for the masses. Thus, party members and the party membership are the foundations of the party leadership.

In terms of organization, the party is highly centralized. The party established a party system parallel to the presidential system and solely controlled some functional departments like the propaganda department and the organizational department. Through the party system, the party contacts its members regularly, and through the party-controlled functional departments, the party controls information and the administrator's personnel. As most of academic heads consider administration a part-time duty, and most of party secretaries took it as a full-time duty, this leaves room for the party heads to perform a major role in administration, particularly on non-academic affairs, from daily operation to living affairs.

By studying the case of Mr. Li, the general party secretary of HUST in 1984-1996, we concluded that in terms of career path, there was no a strict line between the two systems. The authority over major policy-makings was centralized and the authority over policy implementation was decentralized. Thus, the party needed to control the people who are in charge of policy implementation. This caused the party control over cadre personnel. This mechanism also made the personal influences of subordinate heads on policy implementation inevitable. A result is "ruling by man." As the party secretary, Mr. Li performed four major duties: guiding and supervising HUST in the given direction, creating a favorable working and living environment, maintaining a collective leadership at the university level, and supervising the party affairs. Of the four, Mr. Li particularly favored

the second. This resulted from his personal experiences in the Cultural Revolution. In terms of work style, Mr. Li avoided conflict situations and preferred to promote social harmony at HUST. This was a significant change for the party secretaries after the Cultural Revolution.

All in all, the Chinese Communist Party is still the most influential organization in HUST's administration.

¹ The web address of HUST is: <http://www.hust.edu.cn>. What I described here was the vision modified in July, 1997. The following was under the list of HUST's "Current Heads of HUST," Zhou Ji, President; Zhu Yuquan, Vice President, Party Secretary; Zhu Yaoting, Vice President, Huang Chengtang, Vice President; Zhou Shoubin, Vice President; Feng Xiangdong, Vice Party Secretary. Note that only the party secretary and a vice party secretary were listed, and the party secretary was given a title of "vice president". Three other vice party secretaries were absent. All former party secretaries without a presidency title were omitted.

² China has other eight political parties which supported the CCP in the civil war against the Nationalist government. In the CCP terminology, the ally was "united front line;" and the other parties were called "democratic parties." After 1949, these parties existed independently with a precondition of supporting CCP's leadership. Working with these democratic parties is called "united front work" (see also Zhan Tong 1995). In 1996, these democratic parties had total of 159 members at HUST, and five democratic parties had branches at HUST.

³ In 1950-1953, the government launched a land reform, taking farm lands from landlords and redistributing them to poor peasants. Many university teachers and students were asked to participate in this activity.

⁴ Centralization refers to the fact that the party is the highest authority in university affairs. By this principle, the party secretary has the authority to make decisions based upon a majority vote; and presidents implement the decisions.

The Making of HUST: Elitism, Danwei, and Grand Union

The purpose of this final chapter is to construct a framework to interpret HUST's organization and administration. The framework is an ideal-type one in the Weberian sense.¹ This framework has three elements: institutionalized elitism, the danwei system and a collectivist vision of management. While institutionalized elitism describes HUST's operation, the danwei describes HUST's organization. Both are based upon a collectivist vision of management, that is, a collective has obligations to care for the interests of both the collective and its members, but the collective interests are supreme over individual interests. The three elements practiced at HUST can be found in the philosophical ideal of the "Grand Union (*datong*)," a Confucian utopian dream. This chapter ends with a look at the future of HUST in China's market economy reform.

Institutionalized Elitism

Looking back on the operation of HUST, we can see there an institutionalized elitism. "Elite" in Chinese is *jingyin*. *Jing* means brilliant, excellent or superior, and "ying" means "flower" and "hero." *Jingying* or elite then means "the best." It is a commendatory term in Chinese. Elitism in this study refers to respecting and honoring the best, individuals or organizations. However, it should be noted that in Chinese "elite" does not refer to social upper classes. It is oriented to merit and achievement, not to social status, although some of the elite might join the upper classes as a consequence of their

achievements. On the contrary, by tradition, people from upper class families are not regarded as “elite.”²

Elitism is a social value that exists everywhere in the world. However, in the case of HUST, elitism is institutionalized. That is, HUST established a set of institutions to promote and maintain its elitism, which can be observed in student affairs, educational quality control, academic personnel, administration personnel, and the party system. It is also obvious in the academic echelon management. HUST practiced four kinds of elitist institutions in selection, training, use, and the honoring of its best. HUST always selected a small group of people, gave them special training as well as privileges to access various training resources, used them as the spearheads of HUST and role-models for others, honored their achievements, and expected them to make more contributions to HUST. Now let us look at each in detail.

Selection of the elite. This is the first step of the elitist mechanism. HUST selected different kinds of the elite in different ways.

For students, the two most important institutions were the national entrance examination and recruitment of the best students to join the party. The national entrance examination was used to select a small group of young people to receive higher education (see Chapter 5). Only those who passed the examination could receive a regular higher education and only the top performers in the examination could enter key universities. The percentages were very low. In 1994, about two percent of the young people in the age group of 18-24 entered regular universities and less than one percent entered key universities. Thus, university students were regarded as “pre-elite” and were expected to have a bright future. This makes the examination an elite selection measure, extremely important for young people, their families, and the nation.

In taking a close look of the organization and management of the examinations, one will find that they are very similar to that in the imperial examinations. Both are con-

trolled by the central government, open to most people, highly selective, and therefore very competitive. Thus, the current practice can be regarded as a continuation of the ancient one. But there is an important difference. The current examinations are to select the “pre-elite” and leave the training to the higher education system, while the imperial examination directly selected the elite and left the training to the individuals themselves. Clearly, the old approach was not suitable to the need of modern society for various specially trained professionals. In this sense, the current examination retains the merit of the imperial examination and makes it suitable to the needs of China’s modernization.

Recruiting party members among students is another important practice of elite selection. We saw in Chapter 5 that only the students who successfully maintained a high academic standing, showed strong interest in public affairs, and had an excellent reputation among other students were recruited by the party. The percentage was only 1 to 3.6 percent of the total undergraduate students in the period of 1991-1994 (see Table 5.4). Thus it is a more restrictive selection mechanism. Those selected students get extra academic and political training, and these two kinds of training enable them to do better after graduation.

HUST also practices two kinds of selection for academics: in the recruitment of academics and in the selection of those who are to join the party. HUST always tries to recruit the best graduates or academics nationwide. The best graduates, according to HUST, are those from the universities that are more prestigious than HUST; for example, Beijing University, Qinghua University and the Chinese University of Science and Technology. However, since HUST ranks ninth among all Chinese key universities, the scope of selection is very limited. As a result, HUST has to recruit most academics from its own graduates. This is the reason for the high rate of academic inbreeding at HUST. The rates in the period from 1993 to 1995 of academic recruited from HUST for HUST were 60 percent, 75.4 percent and 62.2 percent respectively, and the average was 65 percent. The Faculty of Mechanical Engineering and Science recruited over 80 percent of its academics from its own academics, as this Faculty believes that it is the best in China. It is not

surprising that the rate of academic inbreeding at Beijing University and Qinghua University is even higher than that in HUST, because they were the two best universities in China.

Although not all professors want to join the communist party, party membership is still important for professors, particularly those who want a successful career. As mentioned in Chapter 8, only the “influential” academics were encouraged to join the party. “Influential” could mean having either academic excellence or moral excellence, or both. That is, having the best academics in the party is a basic strategy, which gives the party two advantages. First, the party is able to receive advice and suggestions from these people and so avoids public criticism and related tensions between the party and intelligentsia. Second, having the intelligentsia join the party strengthens the party’s leading position in HUST and in China. One can see that the percentage of the party members among total professors increased rapidly after 1956, and about half of the HUST academics were party members in 1995 (see Table 11.1 and Table 11.2).

HUST also selected academic leaders and administrators among academics. In these selections, two conditions were crucial, party membership and academic seniority. Note that both are unofficial rules, that is, they are not official but they function in practice. For instance, one cannot find a regulation which states that people without party membership should not be promoted to be a department chair, but in the reality there was only one non-party member professor chairing a small department at HUST in 1995 (see Chapter 11). Similarly, there is no official regulation which states that all administrators should be senior academics, but in the reality, no junior academics are appointed as administrators at or above department level. As joining the party and owning a senior academic rank are preconditions for appointments of administrators at department level or above, they make the appointment of administrators a measure of selection of the elite.

However, one would not be surprised by these facts if one learned that these selection criteria were steps to advancement; that is, people advanced from being the best

students to academics, to party members, to senior academics, and eventually to department or university leaders. When those who were qualified were promoted to department or university leaders, they had already gone through a process. In this sense, the selection process matches the process of individual development, and HUST makes the selections at different stages.

These conclusions about the selection of individuals also pertain to organizations. For instance, HUST was selected as a key university in 1960 when it matured. HUST also selected some faculties for special support when they developed, for example, the Faculty of Mechanical Engineering and Science. The Faculty also selected some subordinate units for special support when they developed sufficiently, for example, the Institute of Mechanical Automation (IMA). From all these kinds of selection methods, we can see a widely adopted and recurring mechanism, which I call institutionalized selection of the elite.

It should be noted that these types of selection operated upon a collectivist vision of management, that is, the collective interest is supreme over individual interests. Without this vision serving as an underlying value, such types of selection would be impossible. For instance, higher education in Canada is primarily regarded as a right of each individual, and is not primarily viewed as an arrangement for national interests.³ But China's situation is the opposite; that is, higher education is primarily for the national interests, and only secondly for individuals' interests. Similarly, it is impossible for the American government to point to Harvard University as a "key" university, even though it is one of the best universities in the world. Following the same reasoning, the John M. Olin Institute for Strategic Studies of Harvard University would not single out Professor S. P. Huntington as its academic leader, and ask other academics to support him fully, even though he is a leading scholar in the field. This does not mean that Americans do not respect their best, their elite, the best university like Harvard University and the top scholars like Professor Huntington. But they do not make them *officially* take precedence over the

others. This is the most important difference which indicates that Americans prefer individualism as the fundamental value of management, and China prefers collectivism.

Training of the elite. All those selected are expected to play special roles for the country and for the organizations. Thus they need to be properly trained. In this study, I will describe two kinds of training: professional and political.

Professional training is used to train those selected people in various professions in order to meet the needs of China's modernization. In this sense, the entire Chinese regular higher education system could be regarded as a huge professional training system, and HUST could be regarded as a part of this training system, specializing in training scientific and engineering professionals. Individual units also provide professional training for some selected people, for example, HUST's on-the-job degree study programs and study-abroad programs. Leadership training for the successor at the IMA echelon was also an example of such training (see Chapter 7). Note that only a few selected people are able to participate in this type of training.

Political training was mainly carried out through the party system. Student leader training and the party activities can be regarded as political training. However, the most important political training takes place in the party school system. China established a complete party school system from the Central Party School to local party schools. HUST had a party school, too. By regulation, all middle- and high-ranking party member administrators must be sent to party schools for political training. The school leaders are trained at either the Provincial Party School or the Central Party School, and administrators at both faculty and department level are trained at HUST's Party School. Besides, HUST's Party School provided political training for all new party members and some selected party members, e.g., senior party member professors. It should be noted that although the party training is political, moral training (for example, altruism and unselfishness) and management skills (such as leadership skills) are also components in these

training programs because the primary purpose of the political training is to prepare leaders for the organizations and for the country.

It is also easy to identify the collectivist vision in the training of elite. Training needs a direction and resources. What should the direction be, should it be according to collective or individual needs? The answer to this question further determines the way of allocating training resources and determines who provides the funding. In the previous chapters, one can see that most of this training is guided and supervised by the central government and the party. For instance, as we saw in Chapter 7, the top-down quality control system is the major feature of the Chinese higher education system which covered degrees, programs, courses, and a total-quality evaluation system solely held by the State Education Commission. To ensure the quality, top scholars are invited to participate in various control activities, from guideline setting to textbook writing. In designing this training, the needs of the country and organizations come first, followed by individuals' needs. Thus, the governments and organizations provide the major part of training resources. For instances, until 1993, university tuition was free. After 1993, postgraduate students still enjoyed free education as well as a stipend. All academics enjoy free professional training with salary, including on-the-job degree study and programs of study abroad. All political training programs are free, and a salary is provided as well. Therefore, one has reason to believe that the country and the organizations expected the trainees to serve both the national and organizational interests, and the trainees understand this obligation. The concept at the basis of this arrangement is what I called the collectivistic vision in the training of the elite.

Utilization of the elite. Trained elite need to be “used properly.” They are assigned to the most important places and given the most important tasks, and are expected to serve as leader and role models. For instance, most of HUST's graduates were assigned to the most developed regions and/or the best organizations, for example, the central or provincial government agencies and key enterprises. These regions are the hot spots in Chinese socioeconomic development, and these organizations are the backbones of China's gov-

ernment and industries. As a key university, HUST not only gains special financial and academic support from the State Education Commission, but also garners support from other ministries and key Chinese enterprises. With this support, HUST has become very competitive. For instance, HUST's annual research fund is much higher than any other university's in the central region of China (Hayhoe 1996). Clearly, China expected HUST to play a leading role in education and research, particularly in the central region. This was the reason that HUST was put on the list of the "211 project" (see Chapter 3).

Party members are expected to act as role models for the non-party-member staff, and a major component of a party meeting is to check on how well the party members play this role. Being a role model is a suitable attribute for administrators, so eventually being a party member became a prerequisite for being promoted to administrative level. The case of the IMA echelon clearly showed us a process, by which the academic leaders in the team were selected, trained, supported and utilized. One can see that the most important requirement for team leader was first moral excellence, then academic excellence, rather than the reverse. Clearly, this requirement of morality stemmed from the collectivist vision of management (see Chapter 7).

The common pattern shared by all these examples is appointing the elite to important positions, giving them privileges to access special resources, asking the others to support them, and expecting them to play a leading role for the country and organizations and a role model for the others. Whether for organizational elite or individual elite, the pattern is the same. This widely practiced pattern stems from the collectivistic vision of management.

Honoring elite. HUST honors its elite if they achieve as expected. There are different ways to acknowledge excellence. HUST's graduates are assigned to the most developed regions and the best enterprises or organizations. Successful academics became academic leaders and are given more privileges, for example, study abroad, attending academic meetings, special research funds. Party members have the privilege to access internal in-

formation, and the best of them are promoted to important positions. These rewards enable them to achieve more, and in turn their achievement bring them more rewards, including promotions, better living conditions and many other benefits and privileges. All these further enable them to be more competitive and successful. Their competitiveness and successes ultimately become the achievements of HUST as well as China.⁴

Institutionalized elitism. Now a framework emerges from a study of these practices. These practices lead to a multi-tiered pyramidal form in organization. Some elite stay on the top as the leaders of the organization and/or acting as role models for the others; and many people are at the bottom, as the base. There is strong competition in the selection stage, and then the situation turns to cooperation in the training and utilization stages. The process is institutionalized, and the mechanism is elitism. This elitism would not take place without a collectivistic vision of management. This kind of organization needs to assume that 1) the collective interest is of primary importance, and 2) the pyramidal organizational form is the most effective and efficient for goal achievement. Pulling all these together is what I called *institutionalized elitism*.

The Danwei System and the Comrade Relationship

While institutionalised elitism describes HUST's operation, the danwei or work unit system mainly describes the organisation and the social life of HUST.

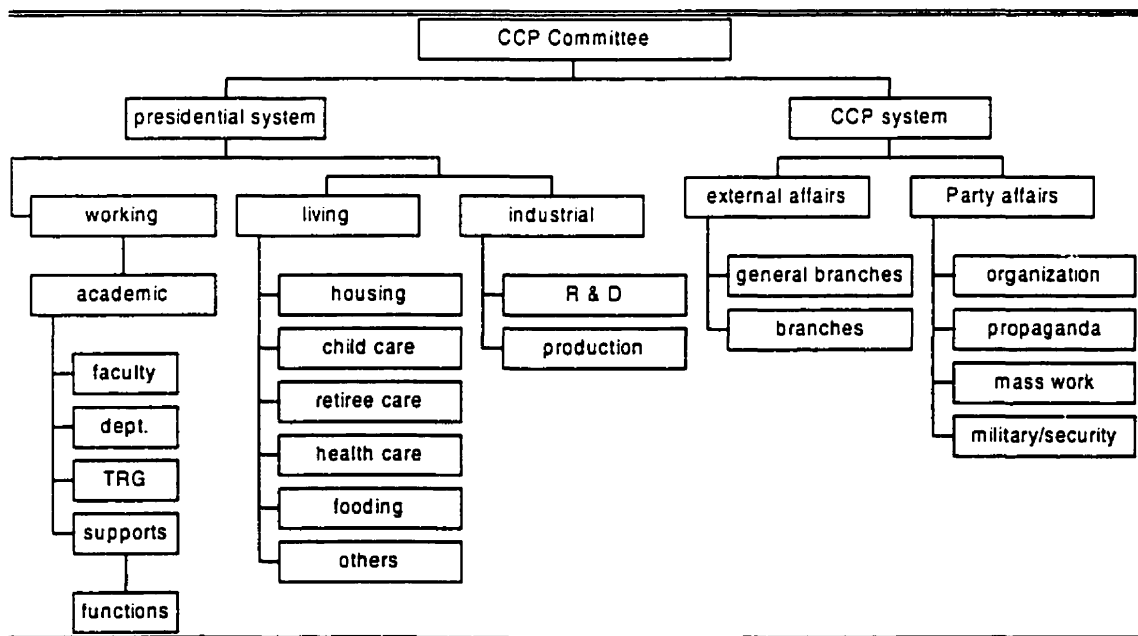
The danwei is the basic enterprise organisational form in China. Thus, the study of the danwei system is important to understanding Chinese enterprise management. Another major viewpoint of this study is that the danwei is *a working/living community under a single authority*. This organisational form determines some major management practices in Chinese enterprise. Chinese enterprise administration could be better understood from this angle. But in the current literature, Chinese enterprise management studies only focus on the working side and ignore the living side (for example see Child 1994). This approach actually assumes that Chinese enterprises purely workplaces and therefore cannot interpret Chinese enterprise management practices well, particularly management of the living side,

mutual influences between the two sides, and management of integration of the both sides.⁵ The previous chapters have paid detailed attention to illustrate these aspects (see Chapter 7, 8, 9, 10, 11). This section will go beyond these to address two more general issues, the origins of the danwei system and the comrade relationship in the danwei.

In the previous chapters, we have seen:

- HUST was designed as an independent unit which had a working system for its social functions and a living support system, which made HUST rely only rarely on external social services. In addition, HUST built its third sub-system: the university-run industrial system. The three systems would make HUST a highly self-sufficient organisation.
- HUST took responsibility to care for the basic needs of its staff, for example, working, housing, medical care, spouse's jobs, children's education and job, care of retirees and so on. Its staff lived out their entire life at HUST after they joined HUST.
- The party system played a major role in integrating all sub-systems and all affairs of HUST, from its social functions to living needs of its staff. It was assumed that these roles would contribute to HUST's social functions.

Figure 12.1 Danwei system in the case of HUST



These features made HUST self-sufficient with encompassing care of its staff, and a fully integrative organisation. HUST is one example of China's danwei system. Figure 13.1 presents the entire system in the case of HUST. Where did these features come from? Knowledge of the origins of the danwei system will give a deeper understanding of the danwei system and the comrade relationship.

Origin of the danwei system. Where does this organisational form come from? In the current literature, I failed to find a single study that provides a proper account of the origin of the danwei system. Thus, this study provided a hypothesis-like account of the origin of the danwei system.⁶ I suggest that there are five factors that contributed to the origin of the danwei system: the Chinese clan system, Mao's youthful ideal of "a new village," the successful experience of CCP's revolutionary bases in the pre-1949 wars, the party's needs for power consolidation after 1949, and the social situation in Chinese society. The following expands my ideas.

The Chinese clan system was the original model for the danwei system. It is clear that the clan system and the danwei system share many similarities, for example, a collective ownership of assets, collective child care and care of the aged, collective arrangements for their members and so on. But they are different in four ways. First, the Chinese clan system usually existed in rural areas, not in urban areas. Second, a clan system was not a specialised organisation, such as university, factory or hospital. Third, the foundation of clan member relationship was kinship, that is, most clan members were blood relatives. This was regarded as "feudalism" in the CCP ideology. Fourth, a clan limited its collectivism to the clan. This was unacceptable to the party ideology as the party's basic ideal is socialism or communism. Thus, one should go beyond the clan system to seek other origins of the danwei system.

In his youth, Mao considered that China had two major problems: peasants and rural society. He spent a few years studying these issues. He particularly favoured local autonomy. In order to change rural society, he actually designed a model for a basic social unit,

which he called a “new village.” In terms of social relationships, he made two distinctions between his “new village” and the clan system. First, the members of the new villages should regard each other as “comrades,” literally, people who share a common ideal, rather than blood relatives. Second, the collectivism in the new villages should not be limited to the villages. All new villages should function as seeds, and eventually spread collectivism to the entire society. But Mao incorporated some clan components into his “new village”, such as collective ownership, local autonomy and self-sufficiency. However, at that time, his “new village” was but a utopian dream (Mao 1919).

In the period from 1927 to 1949, the Chinese Communist Party was involved in a series of wars against the Nationalist Army and Japanese invaders. During the wars, the CCP innovated a revolutionary base model based on Mao’s vision. Mao successfully convinced other party leaders that the Chinese communist revolution had to start in remote rural areas, rely on the poor peasants, build small independent bases over wide rural areas, establish the party’s armed force to protect the poor peasants’ interests, and encourage the poor peasants to support and join the army to fight for their own interests. Accordingly, each base was built as an independent and self-sufficient unit, including a local community, a CCP army, and a local CCP government. The local community supported the army and the army protected the local community, both led by the local government under the supervision of the central authority of CCP. People who were devoted to the Chinese communist movement called each other “comrades.” Mao believed that these “scattered sparks would start a prairie fire,” and destroy the old society. Indeed, with this model, the party won the final victory. Clearly, the success of the revolutionary base model not only proved the merit of Mao’s ideal of the “new village”, but enriched it and made it a reality. Thus, this model advanced of the party ideology and was backed with the party’s successful experiences. It should be noted that at that moment, the revolutionary bases were still local communities, rather than specialised organisations. But we can see that they were very close to the danwei system.

After the liberation in 1949, the Chinese Communist Party faced two major tasks: consolidating its power and building a new society. What did the party have in its hand? The experiences of the revolutionary bases. Thus, the party applied this model, with some modifications, to all organisations throughout urban China. More than just a scattered spark, this was a real big fire that was to completely change urban China, and the danwei system was born in that fire. However, it would be remiss not to consider the social condition of China. In fact, there was a universal lack of social services in urban China at that moment, similar to the social conditions surrounding the Chinese clan systems and the party revolutionary bases. Thus, all new established units had to solve their social needs by themselves, as we saw in the case of HUST (see Chapter 8). It was particularly true for the large-size units, like universities, heavy industrial enterprises and labour-intensive enterprises. In other words, China's social condition was an important environmental factor, which made it possible to apply the revolutionary base model to urban China. In this sense, the danwei system is a successor of the revolutionary base model.

Furthermore, Mao and his comrades did not see the danwei system as a temporary measure. Rather, they saw the danwei system as a practical model to build a "new society," a dream of Mao and the party. It seems perfect that the danwei system combined the merits (in Mao's view) of the Chinese clan tradition and the party ideology, and was supported by the party's successful experiences, and was practicable in China's social situation. Thus, dismissing the danwei system is a real revolution for China and the party.

Comrade relationship. From the origin of the danwei system, we can see the importance of the comrade relationship. As blood relationship was the foundation of the clan systems, the comrade relationship was the foundation of Mao's new village, the revolutionary bases, and the danwei systems. "Comrade" means people who share the same ideal. To the party, the ideal is communism. Ideologically, people in a danwei are comrades who work together for the common ideal. Besides the comrade relationship, they may have other work relationships.

However, people at HUST tend to interpret this comrade relationship through the traditional terms, such as family, brothers and sisters, to deliver its intimate sense and avoid its ideological sense. For instance, the danwei system is interpreted as a “big revolutionary family (*geming da jiating*),” and workers are the members of the “family.” Thus, people at HUST simply called HUST as “home” or “family.” Professor Duan and Professor Sun consistently called their team a “family” and called their team members “brothers.” And meanwhile, they were afraid that their “revolutionary family” was misinterpreted as a “clan family” (see Chapter 7).

The comrade relationship and related interpretations have had a profound impact upon HUST’s management in three aspects. First, because HUST considered itself a revolutionary family, not an employer, and HUST’s staff considered that they were the members of the family, rather than HUST’s employees, HUST cannot fire or lay off any of its staff, just as a family cannot expel its members (see Table 8.3). Thus, HUST can expel a staff only if s/he breaks the law. This view is extremely important in understanding HUST’s human resource management. Second, as HUST is a revolutionary family, it should function as a traditional family, that is, it is to take care of all aspects of its staff’s lives. Thus, HUST actively developed its social service system, provided various social services to its staff and played a householder’s role in dealing with staff affairs, including family affairs, such as funerals (see Chapter 8). Third, as HUST assumed its obligation to take care of its staff as family members, its staff was also obligated to contribute and protect the “family” interests. These mutual obligations are the foundation of HUST’s collectivist vision of management. As I have mentioned before, without this collectivist vision, HUST would not be able to practice its institutionalised elitism and organise teamwork among its members. Thus, HUST actively promotes these family-like mutual obligations simply because they are the cultural foundation of its management. All these stem from the comrade relationship.

Now, we can see that in HUST, the danwei system and the comrade relationship not only created a special working/living environment, and also created a special social relationship. They both further create a special life style at HUST. It is real! As we have seen,

this life style brought HUST achievements as well as problems. But most important, both HUST and its staff have been living in this environment for forty-three years and they are so used to it that they do not want to change it. This is the reality!

Now we encounter a question: What is the future of HUST in the light of China's market reform? It is the subject of the next section.

The Grand Union and the Future of HUST

All utopias are about an ideal society that people dreamed about. These dreams are important as they profoundly influence people's beliefs about the future. Along with all cultures, China has its utopian dream. In this section, we first look at China's utopian vision, compare it with HUST, and then explore what the future of HUST may be.

The Chinese utopian dream is "Grand Union (*datong*).\" Literally, \"*da*\" means \"grand\" or \"great,\" and \"*tong*\" means \"union\" or \"harmony.\" James Legge translated \"*datong*\" as \"Grand Union.\"⁷ The idea of Grand Union came from Li Chi (The Book of Rites), a classical work of Confucianism. It is said that this book was completed in the third or fourth century B. C. The section Li Yen (The Fate of Li) recorded a conversation of Confucius with his student Yen Yen in which Confucius expressed his dream of the Grand Union. He believed that such a society actually existed in ancient China and was lost later. Confucius's dream of the \"Grand Union\" later became the Chinese utopian dream. The echo of this dream resonated through thousands of years of Chinese history. The following is Confucius's dream of the Grand Union:

When the Grand course (*datao*) was pursued, a public and common spirit ruled all under the sky; men of virtue and ability were chosen [to govern]; their words were sincere, and what they cultivated was harmony. Thus men did not love their parents only, nor treat as children only their own sons. A competent provision was secured for the aged till their death, employment for the able-bodied, and the means of growing up to the young. They showed kindness and compassion to

widows, orphans, childless men, and those who were disabled by disease, so that they were all sufficiently maintained. Males had their proper work, and females had their homes. [They accumulated] articles [of value], disliking that they should be thrown away upon the ground, but not wishing to keep them for their own gratification [They labored] with their strength, disliking that it should not be exerted, but not exerting it [only] with a view to their own advantage. In this way [selfish] schemings were repressed and found no development. Robbers, filchers, and rebellious traitors did not show themselves, and hence the outer doors remained open, and were not shut. This was [the period of] what we call the Grand Union (trans. Legge 1967, vol. 1, p. 364-365).

What can we see from this dream of the Grand Union society? Four points stand out:

- The Grand Union society was a meritocracy (*xianneng zhengzhi*), not a democratic society. That is, those who possessed merits were chosen as governors and leaders and people followed them. The governors cultivated their people's best interests with sincerity and tried to achieve social harmony. It is interesting to note that it is somewhat like the institutionalized elitism in HUST.
 - The Grand Union society took the responsibility for caring for people when they needed help, including children, the aged, the disabled and the sick. This seems to me to be like the social services provided by HUST.
 - The Grand Union society was not an economically equal society, that is, a society which distributed its wealth to its members equally, but rather a society in which people contributed what they had to the society and took from it what they needed. This sounds to me similar to the moral principle described by Professor Duan and Sur, as well as Mr. Li, the Party Secretary of HUST (see Chapter 7 and Chapter 11).
 - The Grand Union was ruled by a society-wide collectivistic vision, which is "A public and common spirit rules all under the sky (*tianyian weigong*)."
- This has been regarded as the supreme moral principle in China, and has been repeated by millions of Chinese political philosophers and politicians, from Confucius to Mao Zedong, for

thousands of years. It seems to me that this could be an original motivator of the Chinese communist movement.

Perhaps here we find the prototype of Chinese communism and the management principles practiced in HUST, like the meritocracy, the danwei system and the collectivistic vision of management. They are an inseparable trinity. In it, the collectivism is the soul. The elements of the trinity may have originated from Confucius's dream of Grand Union.⁸

However, the Grand Union society disappeared in Confucius's time. Why? Confucius pointed out the cause:

Now that the Grand course has fallen into disuse and obscurity, the kingdom is a family inheritance. Everyone loves [above all others] his own parents and cherishes as] children [only] his own sons. People accumulate articles and exert their strength for their own advantage. Rulers imagine it is the rule that their states should descend in their own families. Their object is to make the walls of their cities and suburbs strong and their ditches and moats secure.... [People] adjudge the superiority to men of valor and knowledge; and regulate their achievements with a view to their own advantage. Thus it is that [selfish] schemes and enterprises are constantly taking their rise, and recourse is had to arms.... This is the period of what we call Small Tranquillity (*xiaokang*) (trans. Legge 1967, vol. 1, p. 366-7).⁹

Clearly, Confucius considered that the seeking of self-interest caused the disappearance of the Grand Union. Once people started to seek for and protect their own interests, and to put their own interests before the public good, the "public and common spirit" was killed, and the Grand Union died.

Will HUST's administration style be killed off, too, because in a real sense, a market economy would favor self-interest seeking and discourage the seeking of the interest of the collective? It is true that HUST still struggles to keep its administration style, and its spirit is unlikely to die in the near future. However, the symptoms began to show when we saw some people begin to do "black work" and make "black money." We also heard the worry when Professor Duan said that "I think the worst influence of the market reform is that it is against [the spirit of] our collectivism. If we have trouble, it must be caused by this. If we can avoid it, we can grow." Professor Sun made this very point when he commented that the challenge to his team is "a challenge of individualism to collectivism." In this sense, it is very possible that the HUST management style may disappear as China's market economy develops.

Whatever happens to HUST, however will be a mirror of the fate of China, communist China as well as traditional China, because the Grand Union ideal is not just the dream of Chinese communists, it has also been the dream of the Chinese people for thousands of years. It is the soul of China. *The dream dies, and China dies.*

Conclusion

The primary aim of this work has been to provide a case study of the organization and management of a key Chinese university and to examine the effects of the 1985 educational reform on the university, in order to promote international understanding of Chinese universities and their operation during the age of reform. Due to a general lack of such studies in the current literature, this study provides a holistic view of HUST, a key Chinese university, and pays detailed attention to its organization and administration. It gives the reader a close view of what a key Chinese university looks like and how it functions today.

In addition, this study presents a framework to describe the essentials of HUST's organisation and administration. It comprises three elements: the institutionalised elitism, the danwei system, and the collectivistic vision of management. The institutionalised elitism

refers to the routine practices for selection, training, utilising and honouring the elite. The danwei system is defined as a working/living community under a single authority, which supports the institutionalised elitism. Both were guided and supported by a collectivistic vision of management. And this vision likely stemmed from the Grand Union ideal, a Confucianism utopia of ancient China. Although many changes have occurred in HUST since 1985 when the educational reform took place, these three features are unlikely to disappear in the near future. But they may or may not change in the distant future. Knowing these features will help people to work with Chinese people, and monitoring the changes in these features will help one to predict the future of China.

¹ H. H. Gerth and C. W. Mills commented on the meaning of Weber's "ideal type":

The much-discussed "ideal type," a key term in Weber's methodological discussion, refers to the construction of certain elements of reality into a logical precise conception. The term "ideal" has nothing to do with evaluations of any sort. For analytical purposes, one may construct ideal types of prostitution as well as of religious leaders. The term does not mean that either prophets or harlots are exemplary or should be limited as representative of an ideal way of life (Weber 1981, p. 59).

This study uses this term "ideal-type" in the same way. That is, the framework I constructed contains certain elements of the reality that I consider essential for interpreting HUST's administration. It is not for evaluation of HUST's administration.

² The history of the Chinese imperial examination system is a good example of this difference. Before the Sui Dynasty (581 - 618), China had created several systems to select government officials, which were called "inspection and recommendation (*caju*)" and "seeking and opening (*zhenpi*)" in the Han Dynasty (206 B. C. - 220 A. C.) and "nine grades recommendation system (*jiupin zhongzheng zhi*)" in the period of the Three Kingdoms (220 - 280) and the period of the Northern and Southern Dynasties (420 - 581). The basic selection methods in these systems were recommendation and inspection. The local governors were in charge of both. As a result, most of the recommended people came from the upper-class families. The situation was described as "none of the high-ranking officers were from the lower classes; no low-ranking officers were from the upper classes (*shangpin wu hanzu; xiabin wu shizu*). To correct this malpractice, the open imperial examination system was created in 602 and became the major channel for selection of government officers (Mao Lirui & Shen Guanqun ed. 1986, vol. 2). As a rule, no one, including the emperor, had authority to appoint an officer who did not pass the examination (Qian Mu 1966). This system was adopted by most later dynasties until 1905 when the Western style school system replaced it. The fundamental difference of the open imperial examination system from the previous systems is that the imperial examination tried to separate the relationship of the government official appointment from the individuals' social background, and instead link the official appointment to individual merit. I see this as an example of Chinese elitism or elitism in the Chinese context.

³ See the speech of Paul Martin, Canadian Minister of Finance, on February 24, 1998 introducing the 1998 Federal Government Budget. The reason he gave for a special higher education budget allocation in 1998 was that Canadian higher education should be accessible for all Canadians. Also see the signs of student protesters during the Canadian protests between 1995 and 1998. One used very often was: "Education is a right."

⁴ HUST as well as Chinese governments issue various awards. Table 12.1 presents the awards issued on Teacher's Day in 1995. Note that the scope was very broad.

Table 12.1 Awards issued in HUST on the 1995 Teacher's Day

award	by	scope	number
Excellent Educator	HUST	all staff	17
Educational Activists*	HUST	all staff	45
Excellent Research Award	HUST	academics	8
Respect-work (<i>jingye</i>) Award	HUST	academics	47
Excellent Unit Award	HUST	all units	2
Individual Honor Award	HUST	all staff	1
Excellent Teaching Award*	HUST	academics	183
Excellent Textbook Award*	HUST	academics	62
Baogang Award	HUST	academics	4
Yilida Award	HUST	academics	10
National Excellent Teacher	State	academics	2
Female Worker Award	State	all staff	1
Golden Global Award	State	all staff	1
Total			383

Source: Field notes

*Each of them has three or four grades.

⁵ In my view, in the current literature, the danwei system has been studied separately by sociology and management. Sociology focuses on the living side and ignores the working side (examples see Xu Xinyi 1994, Li Hanlin & Wang Qi 1996, Shaw 1996), while management focuses on the working side and ignores the living side (example see Child 1994). In addition, the mainstream of sociology studies of the danwei system are from the perspective of social control. This perspective is fundamentally different from management perspectives. For instance, the focus from the perspective of social control is how China uses the danwei system as a measure to control its people. Thus the danwei system was introduced as a measure of social control (example see Teiwes 1987, p. 94), while the focus of management perspective is how a danwei operates to achieve its social functions in a given environment. To my knowledge, the studies from management perspective are rare.

⁶ Li Hanlin and Wang Qi suggest three factors for the origin of the danwei system: the Chinese clan system, the party revolutionary bases, and the party's needs to legitimise and consolidate its power (1996, p. 90). But their study does not provide historical data to support their suggestions. It remains unclear how the Chinese clan system, the CCP revolutionary bases eventually became the danwei system. I have initiated a study of the origins and present working of the danwei system. Here I report only some initial findings of the study.

⁷ Schram translated "*datong*" as "Great Harmony" (Schram 1991, p. 8, 18). As what Confucius talked about is a society, the Grand Union is perhaps closer to Confucius's idea.

⁸ John K. Fairbank once commented upon the minds of the CCP leaders as the following:

In the minds of CCP cadres at Yen-an [the major CCP revolutionary base in the period of 1935-1948], however, there flourished the kind of enthusiasm for egalitarianism that had typified earlier popular movements. In some respects they were successors to the members of millenarian cults, individuals idealistically committed to a utopian vision and ready to share danger in pursuit of it. The novelty lay in their view of China's Marxist-Leninist revolution as a part of an international movement in the forefront of history (1987, p. 43-44).

Clearly, Fairbank does not see the Chinese Communist movement as a part of the international communist movement, but a continuing movement of pursuing Chinese utopia. It is also interesting to note that the goal that the Chinese Communist Party designed for China at the year 2000 is to become a "small tranquility (*qiaokang*)" society. The term "small tranquility" is also from Confucius's utopian dream. Therefore it could imply that the party will approach the "Grand Union" after the "small tranquility" is achieved.

⁹ According to the original text, I made one change in Legge's translation. Legge translated "*daren*" as "Great men" and I changed it to "rulers" because in the original text, the word "*daren*" means the persons who ruled ordinary people.

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