Cultural Perspectives on the Functional Traditions of Japanese Higher Education

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INTRODUCTION

Similar to the 1950s when the United States became the leader of the free world, the Japanese are now learning how to assume their role as the global economic leader. With the burst of the "bubble economy", however, government, business, and educational leaders are reexamining what Japan's responsibilities should be as the foremost economic world power. The changing world order is causing the Japanese to consider how prepared their social, economic, and educational systems are to take the country into the next century. What role higher education, in particular, is to play in preparing Japan and its people for its future global, economic, and social responsibilities is not abundantly clear, however, nor is it well studied (Amano 1986).

In this paper we consider, specifically, how Japanese culture has shaped the contemporary structure of higher education and the problems this structure poses for Japan's global leadership. We question, as well, how adequate the modernistic structure of Japan's higher education is to prepare its citizens for the future they will face in the coming century.

We begin our discussion, first, by addressing the theories of modernism and postmodernism and their relevance to understanding a nation's system of higher education. Next, we consider the modernist structure of Japanese higher education and the problems it poses for Japan's future development. In our assessment of Japanese education we use the postmodern concept of "cognitive mapping" to help understand the role culture plays in defining the place of higher education in contemporary Japanese society. Third, we present a critical analysis of the current reform efforts in Japanese education and offer some comparative perspectives on the

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future of Japan's higher education. We conclude this paper by considering the problems inherent in modernistic change and the implications for the future development of Japanese higher education.

MODERN AND POSTMODERN THEORIES

Traditionally, in Japan, formal education served to educate either the ruling samurai or the common people. The samurai were educated in the *hanko* schools while the common people were schooled in the *terakoya*. This historical differentiation provided a functional distinction between those who would lead the country and those who would serve it.

This differentiation of education was certainly not limited to historic Japan, as most other feudal societies separated the education of the leaders and nobles from that of the common people.

As more democratic societies emerged, however, education became a central component in the maintenance of a free and open society. Even in these democratic societies, education typically followed a functional and modernistic strategy where students were educated either to be competent citizens or trained to reproduce the existing workforce (Carnoy and Levin 1985). The modernistic premise of such education is based on the belief in rationality and reason that science provides the solutions for all social, cultural, and economic problems. Advocates of this modernist perspective assume technological progress is linear and inherently good.

The success or failure of a nation's development is more complex than simply the implementation of modernistic principles of science and technology. The global context of economic, political, social, and economic relations has grown so complex since World War II that Jameson (1988, 359) concludes we are no longer in the era of modernism, "we are in something else." This "something else" Jameson proposes is "postmodernism", in part, because of the failure of modernism to account for the not always rational development and linear progress of global change.

How then are we to understand and explain this postmodern world? Jameson offers "cognitive mapping" as one solution to understanding social reality that no longer offers the modernist's coordinates. Jameson's conception of cognitive mapping is derived from Kevin Lynch's (1960) study where he asked individuals to draw maps of their cities from memory. Lynch found that individuals carry around

"maps" in their heads of the physical space in which they live and operate. Although these maps did not always represent the actual order of the city, individuals were typically able to draw maps that represented what was most important or functional for them in their cities. These mental maps differed from individual to individual, however, based on their use of the city and the guiding geographic or constructed markers (rivers, hills, monuments, distinctive buildings) that enabled people to negotiate their movement within the city. Jameson suggests that the mental maps of city space that Lynch explored are analogous to the mental maps of the social and cultural space we carry around in our heads.

From Jameson's postmodern perspective we can understand cognitive maps as uniquely personal guides to the complex and bewildering array of social realities. "Social totality" for Jameson is determined, therefore, by the coexistence and interaction of all individual's subjective cognitive maps. Although postmodernism can offer no certain way to identify individual reality or chart an individual's cognitive map, postmodernism does account for the effect of culture on collective social interaction. Understanding and identifying this collective interaction is the cultural effect modernists are so deficient in recognizing. Postmodernists' recognition of multidimensionality enables a more in-depth understanding of how individual consciousness or cognitive maps collectively form culture and behavior. Rather than assuming there is an inherent or knowable truth, postmodernists recognize that knowledge and truth are social constructions. Postmodernists reject the modernist "illusion that disengagement and objectification are central to the construction of knowledge" (Belenky, Clinch, Goldberger, and Tarule, 1986, 18). The postmodern perspective understands that scientific knowledge is a social construction, "rather than simply a process of discovery of facts waiting for the cleverest scientists to find them" (Kempner, 1992, 70).

Postmodern interpretations are helpful not only in identifying the process of knowledge construction but also in aiding our understanding of the nonlinear process of national development. Because each nation's development is dependent upon the larger global context, modernistic interpretations are insufficient to explain the role culture plays in such development. Rather than assuming change is linear and progressive, postmodernists look to culture, history, and individual human agency to explain developmental processes that are not necessarily rational.

In this paper we are guided by postmodern criticisms in our search to understand the capacity of Japan's current system of higher education to serve its future

social, economic, and educational needs. A postmodern perspective is particularly helpful for understanding the role higher education plays in a country's social and economic development, because, as Giroux (1992, 56) observes, postmodernism "not only challenges the form and content of dominant models of knowledge, but it also produces new forms of knowledge...unrepresentable in the dominant discourses of the Western canon." Because higher education institutions in most democratic societies are the principal location where knowledge is constructed and disseminated, proponents of postmodernism take seriously the effects of culture, power, and politics on this construction of knowledge. Herein the concept of cognitive mapping is particularly helpful in identifying the role higher education and its faculty play in the intellectual development of students and helping students locate their place within society.

In our investigation of the cultural influences on Japanese higher education we follow Carnoy and Samoff's (1990, 3) premise that: "Analyzing education...is an important way to understand larger economic and political change, or the lack of it." We believe that a cultural perspective is central to understanding the place of higher education in Japanese society and, consequentially, the effect higher education has on the development of students' cognitive maps and the social, economic, and scientific knowledge constructed in Japan. We believe, further, that modernization theory does not provide an effective model to understand and guide educational change because it supposes linear progress and offers a rationalistic perspective that is incapable of understanding the complexity and chaos of the larger cultural and global context. Furthermore, modernism fails to account for the cultural influences and individual circumstances of a nation's unique development. In the next section of this chapter we focus specifically on these unique cultural circumstances of Japan's national development and how culture defines both the purpose and structure of Japan's institutions of higher education.

THE MODERNIST STRUCTURE OF JAPANESE EDUCATION

In order to understand the influences of culture on Japanese higher education we begin with a brief overview of the historical foundations of education. Next, we consider the function contemporary elementary and secondary education have in preparing students for the well-known "examination hell" they face. We address, as well, the role of the mother, teacher, and *juku* (cram school) during these

formative education years. Following our brief overview of elementary and secondary education we discuss higher education and both the sorting function it has in Japanese society and its function in placing students within business and government, or "Japan, Inc.", as it is often called. We conclude our discussion of the modernist structure by summarizing the major problems of contemporary Japanese education.

Historical Antecedents of Japanese Education

The foundational element of formal Japanese education, as we have noted, was a dual system for the samurai leadership and the common people. This distinction remained intact throughout the "Edo" period under the Tokugawa Shogunate until the Meiji Restoration in 1868. The Meiji era ushered in the opening of Japan to the Western or "modern" world in its social and commercial relations. The Meiji era also established the "First Educational Reform" that abolished the dual system of the hanko and *terakoya* schools (Tokutake 1988 and Reischauer 1988). Although the dual structure was eliminated, the underlying distinction between the elite samurai and commoners remains an implicit part of the contemporary Japanese educational system.

The Meiji Restoration had a profound impact on the traditionally isolationist Japanese society. Japan, of course, eventually grew into a world military power that culminated in its defeat in World War II. Following Japan's surrender in 1945 the Allied Occupation forces set about restructuring the political, economic, and educational systems of Japan. Although the US philosophy of equal educational opportunity was the basis for educational reform, this perspective has evolved within the mandates of contemporary Japanese culture. Whereas modernist interpretations of educational reform might assume Japan's system of education "modernized" by becoming Western, even the simplest analysis of contemporary Japanese education displays vast cultural differences between the system that evolved and the US system it emulated.

Outwardly, Japanese education with its 6-3-3-4 structure (elementary, junior high, high school and college, respectively) appears similar to the US educational system. On further examination, however, the remnants of the dual system are evident in the strict hierarchy extending from pre-school to the collegiate level. What is important to understand here is not simply that Japan adopted the US model of education, but *how* Japanese culture affected this adoption to fit the

historical, social, and cultural circumstances of Japan.

Whereas "education is one of the major factors that made it possible for Japan to found a modern state in such a short period of time" (Tokutake 1988, 11), this same system may not be so effective in moving Japan into the next century. What was functional and modern for the mid-twentieth century may not be modern enough for the new age of the twenty-first century. We question if Japan can afford to be only modern in its educational system. Does not the educational system need to be postmodern to foster the development of students who will be better prepared to face the economic and social changes now demanded of Japan as a new world leader?

Elementary and Secondary Education

Because detailed explanations of the size and structure of the Japanese system of education are widely available elsewhere, our focus here is on the underlying meaning of this contemporary system, not its specific demographic structure. Whereas the basic function of Japanese education is for the full development of the individual (Thomas and Postlewaite 1983), we characterize contemporary education in Japan as highly functional. Although the distance from the top of Japanese civil society to the bottom is not as great as in many developing country, or even a developed country such as the US, Japanese society is still highly differentiated. If a child does not or cannot begin in the "right" preschool, access to the elite levels of higher education is not likely. In previous research (Kempner and Makino 1993) we related a story where a three-year old child was denied entrance to a preschool because she did not have the appropriate references. Similarly, Beauchamp (1991) retells a story of Dore's (1976) where a preschool decided to test the mothers, since it could not devise an effective entrance examination for its two-year old applicants.

Tracking begins at the onset of education for Japanese children where merit plays only a part in a child's access to the best employment in government or business. Although the emphasis on testing would seemingly assure a meritocratic system in Japan, the meritocracy begins *after* the student has gained entrance to the appropriate pre-schools and elementary schools. Without access to the finest schools, financial support to attend the best *jukus* (examination cram schools), and daily educational assistance at home from the mother, a student is not likely to succeed at the higher levels of education.

Perhaps one of the strongest cultural components of the Japanese educational system is the *kyoiku mama*, the "education mama." In Japanese households the mother assumes responsibility for tutoring and guiding the children in their daily studies. As students advance in school the mother typically advances with them to assist with the actual homework and the management of daily assignments. A woman typically becomes well educated to serve her children, not necessarily for her own professional advancement.

In addition to the unique role the mother plays in Japanese education, the teacher too has a different status than in most other countries. Legislation in the 1980s placed teachers salaries among the highest of all public employees in Japan (Tokutake 1988). Obedience to masters and teachers is a traditional cultural component of Japanese society. Zen philosophy expects "absolute subordination of a terribly hardworking student to a strict but ultimately loving teacher" (Frost 1991, 296). Teachers in Japan have status in accord with the importance placed on education in general. Again, education is attributed by many individuals as the reason Japan was able to rise so quickly to global dominance in the economic marketplace. Although Japan's educational system has been quite successful to the present, is it now capable of fulfilling Japan's social and economic needs for the coming century?

Higher Education

Whereas the infrastructure of the Japanese elementary and secondary systems is quite rigorous, the system of higher education serves a very different purpose in Japanese society (see Table 1 for an overview of the Japanese higher education system compared to the US). Since the reformation of education after World War II the Japanese have emphasized the role elementary and secondary education play in laying a firm foundation for children, but somewhat at the neglect of higher education.

Table 1 Comparison of Japanese and US Higher Education

Type of Inst.	Number of Inst.		Number of Students	
	Japan	US	Japan	US
National	99		621,126	
Public	66	599	101,062	6,318,000
Private	457	1536	1,978,916	3,005,000
total	622	2135	2,701,104	9,323,000

※ Japanese data are from 1999 (Monbusho Gakko Kihon Chousha). US data are estimates for 1993 (US Digest of Educational Statistics)

Once Japanese students begin their formal education, which as we have noted often begins at two-years of age, the goal becomes an obsessive quest for entrance into the most prestigious institutions of higher education. Entering one's school of choice is the single goal for most Japanese students. This quest for entrance translates into examination hell. The pressure leading up to notification of acceptance or rejection is so severe it ends in suicides for some of the most distraught students who did not get into the university of their choice.

As opposed to the broad base of excellent universities throughout the US, elite education in Japan is centralized in Tokyo, where the finest universities train students for the most prestigious positions in government and business. Graduates of the University of Tokyo (Todai), for example, are rewarded with entrance into the highest levels of the federal bureaucracy and business. As Greenfeld (1994, 150) explains : "The Todai entrance exam determines who is destined for what passes for the good life in Japan." The key to success for Japanese youth, therefore, is not *what* they learn at the university but *where* they attend. A student Greenfeld (1994, 153) interviewed explained : "Once you get into Todai...you know everything will be easier, that everything will be okay, that you've made it. So what's the point of doing anything once you are at Todai if there is no longer anything to be gained?"

The sorting function of college examinations is far more important than the academic content of higher education (Amano 1986). One student we interviewed characterized his prominent private institution as a "Disneyland" where his main purpose was to drink and socialize with his future business colleagues (Kempner & Makino 1993). As Reischauer (1986, xviii) has observed : "the squandering of four years at the college level on poor teaching and very little study seems an incredible waste of time for a nation so passionately devoted to efficiency."

Among the many criticisms of the functional nature of Japanese higher education, examination hell is the foremost concern. Whereas the need for advanced education has rapidly increased, the path to the "good life" is only through the examination hell that leads to Tokyo, the economic, cultural, governmental and educational center of Japan. As one professor observed, to be "truly educated" an individual must be educated in Tokyo (Kempner & Makino 1993, 189). The competition for entrance into the University of Tokyo, a small number of private institutions (Keio, Waseda, and Meiji, for example), and the major national universities in Osaka and Kyoto is incredibly fierce because it is entrance to these few institutions that determines who will be assured economic and social success in

Japanese life.

How best to reform this current system of education is, therefore, a concern for many Japanese political and educational leaders. Although conservatives and liberals disagree on the root cause of the problems, we believe three basic issues encompass the majority of concerns regarding the educational system. *First*, the examination structure, culminating with admission into higher education, casts a dark shadow over the entire educational system. Because of the fierce competition for entrance into higher education, even two-year olds, as we have noted, are not spared from the effects of examination hell. *Second*, the contemporary cultural environment in Japan has a great effect on the schools and the daily interaction of students, teachers, and parents. Violence against teachers and bullying or *ijime* of students against one another is the subject of considerable national concern. The changing nature of the Japanese family, disobedience to parents and elders, defiance of group norms, and lack of respect for public property by some youths are new behaviors in direct conflict with traditional Japanese culture. *Third*, the influence of the external environment is also responsible for changes both within the schools and the larger Japanese society.

Although no one can be certain what cognitive maps will be needed for the future, it is our premise here that higher education should equip individuals with the ability to adapt to the changing social and economic circumstances life in the "new age" will require. Because of the pressures both from the internal and external environments of this new age, a number of reform efforts have been attempted in Japanese higher education. We review next some of these reform efforts and consider the effectiveness of these changes.

EDUCATIONAL REFORM EFFORTS

The Japanese Fundamental Education Law of 1947 proposes, among other concepts, that education should "aim" at developing individuals "imbued with an independent spirit as builders of a peaceful state and society" (quoted in Thomas and Postlethwaite 1983, 57). How well the present educational system achieves this goal is under considerable examination and has been the subject of numerous commissions and reports over the past ten years. Many individuals express concerns over how well the education system meets the needs of contemporary Japanese and global society. For example, as one professor explained, he believes the

purpose of the national universities has become simply to provide "people useful for running Japan, Inc." (Kempner & Makino 1993, 188). This focus on training, even at the most prestigious universities, is alarming for many Japanese intellectuals who see this functional purpose of education as providing a narrow vision of the role higher education should have in society. Expressing concerns over education, but focusing primarily on violence and delinquency in the schools as the problem, former Prime Minister Nakasone commissioned the Ad Hoc or Provisional Council on Educational Reform (PCER) in 1984.

The PCER deliberated for three years and ultimately was quite critical of the present educational system. The PCER reported Japanese education was excessively rigid and was failing to respond to the changing circumstances of student's lives. Furthermore, the Council found the educational system to place little importance on individual development, or the need for lifelong learning (Tokutake 1988 and Monbusho, 1992). The PCER additionally proposed three themes for educational reform : an open mind, a sound body and a wealth of creativity" ; "freedom and self-determination, and a sense of public spiritedness" ; and "Japanese and the world order", or internationalization (Tokutake 1988, 52).

In a series of four reports the PCER provided recommendations and specific proposals for remediating what it found wrong with the national educational system. In summary, its recommendations considered the need for improving moral education, teacher training, reducing uniformity in the curriculum and in the examination system, improving choice among public schools, internationalizing the schools, and decentralizing school administration. The actual implementation of these reform efforts has ultimately been rather modest, however. Perhaps most disappointing for higher education in particular was the failure to accomplish significant changes in the examination system for entrance into universities.

The exclusive reliance on examinations for gaining entrance to higher education creates, in Tokutake's (1988) terms, a "distorted" educational system. The Japanese educational system is a pyramid with a broad base that culminates in a narrow peak that only a few can reach. Unfortunately, with everyone trying to reach the top all but a very few individuals will fail in their attempt. Drucker (1964) noted that the pyramid structure in the US labor market creates an inherently dissatisfied workforce because not everyone can be a top executive. Similarly, although most Japanese compete vigorously for the relatively few openings at the top universities (e.g., Tokyo, Waseda, and Keio), many are distraught at failing to gain entrance to the

school of their choice. In fact, many students who fail at their first attempt, or ronin as they are known, will spend a year or more studying to take the examinations again.

While this pyramid structure of Japanese education appears quite dysfunctional for the mental health and ultimate education of the majority of students, it serves as an effective "rationing device" for higher education (Evans 1991, 214). Because higher education in Japan is principally a commodity (see Wexler 1987) to be bartered for a job, the actual learning a student receives is of minor importance to where this learning occurs. Unfortunately, by its definition, elite higher education cannot be universal and must be rationed. This reality of rationing conflicts, however, with the strong norms in Japanese culture toward uniformity and group cohesiveness. The dilemma, as Vogel (1979) suggests and elaborated by Frost (1991), is how to differentiate students into separate levels or tracks when everything in the culture and classroom aims toward group unity. The solution appears to be the intensive screening experience or examination hell where students are given one chance to succeed in this single-elimination tournament (see Temple and Polk 1984).

Because of the group-oriented culture, there are relatively few ways to screen students on the basis of individual work throughout the school year. Therefore, as a rationing device, the examination system does effectively screen students at several critical times in their education. Rather than consider the cumulative success of students throughout their educational career, the Japanese system employs the single-elimination tournament model. Students have one chance, typically on one day, to regurgitate all the information they possess. Because knowledge is not the issue, students spend hours upon hours memorizing facts and figures to prepare for the one chance they will have to demonstrate their proficiency at accumulating knowledge. Freire (1970) terms this process the "banking concept" of education where teachers make deposits into students heads and then recall these deposits later in an examination of the knowledge they have retained in their accounts. Little if any concern is given to thought process, problem solving, or any of the other integral components to the student's intellectual development when this banking concept of education is followed.

As Frost (1991) suggests, there are other interpretations of the reasons for maintaining the current banking system of education in Japan that culminates in the examination hell. The present system continues to operate, in part, because a number of parties have so much invested in it. *Jukus* exist for the sole purpose of

examination preparation and publishers of examination guides and benefit greatly from the current system. Entrance examinations are also one of the principal sources of revenue for many private institutions. Institutions prepare and grade their own exams and charge the equivalent of over four-hundred dollars to each student. Because a student will often take examinations at four or five institutions, giving examinations is a lucrative business for many universities and colleges. While there is constant concern over how the examination system affects all of Japanese education, few fundamental changes have actually been instituted in the examination system. Some general reform efforts have been accomplished, however, as the Japanese reassess the effectiveness of the current education system.

Among the rhetoric and actual changes taking place in reforming Japanese education, the recognition of the need for life-long learning is notable:

> If our nation is to foster a society which is rich and dynamic enough to face the challenges of the 21st century, people must be provided with opportunities for participating in learning throughout their lives. (Monbusho 1992, 100-101)

As an alternative to the existing tournament model of education, where once individuals fail or leave there is no return, the Central Council of Education submitted a 1990 report entitled "The Development of an Infrastructure for Lifelong Learning." This report was followed in 1991 with "Reforms of Various Educational Systems for Relevance in a New Age" (Monbusho, 1992). To foster lifelong learning the various reports encouraged cooperation of the family, school and industry "toward building a lifelong learning society" (Monbusho 1992, 101). This cooperation is to be accomplished through the implementation of lifelong learning fairs, a five-day school week, a university transfer credit system, alternative ways of accessing higher education, moral education, and improvement in test questions. While each of these issues has the potential for stimulating change, reform for the entire system is unlikely without fundamental modifications at the peak of the pyramid, elite higher education.

The University Council of Monbusho has recommended, however, a number of changes to "promote the reform of higher education" (Monbusho 1992). Among the changes the University Council promoted was encouraging diversification of higher education institutions by simplifying and making more flexible the procedures for establishing universities. The logic for this proposed change is to stimulate the development of distinctive institutions that will serve the differential academic needs of students and research interests of the nation.

The Council also proposed strengthening higher education through the development of "world class standards of education and research." These standards, the Council suggests, are to be attained by improving faculty skills and upgrading graduate education by doubling the total number of graduate students by the year 2000. The Council specified, as well, the need for increased funding to promote scientific research and the development of programs for young scholars and scientists.

In addition to improving existing institutions and research facilities, the Council also encouraged further improvement in entrance examinations. One significant change that has been made in the examinations procedure has been the implementation of the "joint first-stage achievement test", or screening examination. Prompted by the need for national universities to limit the number of students taking their examinations, this first-stage test is given early in the calendar year as a way to screen students who will be allowed to take the specific institutional and subject examinations later in the spring. While the national universities have embraced the first-stage test, since they do not benefit directly from charging students, most private institutions do not wish to lose the money they receive from having large numbers of students take their examinations. Although the first-stage test serves an early screening function it has done little to change anything substantive about the role examinations play for student's chances for entering higher education. Realistically, the first-stage test is simply a screening device for the examination hell most students will endure later in the year anyway.

In its proposed changes for higher education the Council acknowledged also the need for increased scholarship programs both for Japanese students and foreign students wishing to study in Japan. Relative to the US, however, scholarships or financial aid for Japanese students are quite modest. While the Council expects further expansion of such programs, the details on how this is to occur have not been specified.

Although we have characterized Japanese education as primarily modernistic, Monbusho (1992, 137) recognizes the need for an educational system to meet the demands of the coming age : "When we consider the role of formal education in the context of internationalization, the most important issue is how to develop Japanese citizens who are trusted in the international community." How the educational system can best equip Japanese students with cognitive maps that insure this trust and guide their future in the postmodern world should be, we believe, the essential

question underlying educational reform and future social and economic development.

CONCLUSION

Innovative "production and organization concepts" in business and management, according to Best (1990, 2), are responsible for Japan's economic success. This new competition, Best argues, is the reason as well for the economic decline of the US. Deterioration of US industrial competitiveness, Best explains, is due to problems of organization, not of productivity, as is commonly argued :

> ...defining America's industrial decline in terms of slow rates of productivity growth is consistent with an image of an organizationally sound economy in need of minor adjustment. It implies that industry can be revived by a set of government and managerial policies that do not require deep-seated organization changes. (p. 3)

Similar to the need for reform in the US economy to meet the new competition, we believe Japanese education, particularly at the collegiate level, is in need of accomplishing the same "deep-seated organization changes" facing the US economy. We agree with Kitamura (1991, 318) that : "The days of simply emphasizing the traditional screening function are over for Japanese higher education." If higher education is to serve Japan's future economic, social, and educational needs it must meet the "new competition" posed by educational systems in other countries.

As we have reviewed in this chapter, although the contemporary system of Japanese education has been quite functional thus far for the cultural needs of business and government, we question the ability of this present system to effectively serve "Japan, Inc's" future role as a global leader. Our interpretation is a post-modern one, wherein we believe the cognitive maps students develop in the present system of education will be inadequate to guide them successfully into the future. Because it is impossible to know what students should possess in their cognitive maps, the task of an educational system should be to prepare students with the capacity to understand and adapt to the changing needs of the future. Unfortunately, as we have noted, contemporary Japanese higher education is modernistic in its structure ; it serves more to ration education, bank knowledge, and dispense information than to fully educate students. The true educational function has traditionally been the responsibility of the employers who knew, to a certain extent, that they were hiring a student effectively socialized to the culture of Japanese government or

business. Changes in Japanese society and the economy, however, are altering not only the schools and the family, as we have noted, but also the expectation of life-long employment with the same company. Whereas businesses could afford to train employees, knowing it would be a life-long investment, the risk is growing that employees may actually leave the company or have to be laid off. In the US, this problem of training was solved, somewhat, by students receiving a better education at the collegiate level, although many employees still undergo some initial training after college.

The current economic and social changes Japan is now facing are already causing declines in the college population and rising costs of preparing for and attending college. Because such a high proportion of universities are private and tuition-driven, it is not likely that all institutions will survive this changing demographic and economic climate. Kitamura (1991, 311) suggests that "Japanese higher education will face a period of 'institutional self-selection' in which a number of higher educational institutions could be closed or severely cut back." The US faced a similar survival period for higher education with the decline in the college-aged population in the late 1970s and 1980s and drastic reductions in funding in the 1990s (Chronicle of Higher Education 1993).

While the survival of the major Japanese national universities is secure, adequate funding for these institutions is of great concern to the faculty, as reported by the Survey and Study Committee for the Financial Base of National Universities (1991), presented in Kempner and Makino (1993). Nevertheless, as the college-aged population declines in Japan and as costs increase, state bureaucrats continue to question "those aspects of higher education that do not directly and substantially contribute to the national goals of Japan, as defined in economic terms" (Kempner & Makino 1993, 191). The problem with this modernistic definition of education, however, is that now as a world leader Japan has obligations beyond only economic ones. Japan can no longer afford an education system that operates only on modernistic principles. This present system leaves Japanese students with cognitive maps unsuitable to guide them in the new age. Rather than postmodern maps that embrace complexity and a multicultural awareness for the evolving internal and external cultural environments Japanese students possess maps whose main purpose is to guide them to the right college.

As Japan continues to internationalize, the economy, government, and universities become even more dependent upon the global marketplace of products, ideas,

and, politics. The increasingly multinational nature of business requires employees, especially executives, to be equally multicultural in their outlook, understanding, and education. While the traditional educational system may effectively create the "salary man" for Japan Inc., this practice may not be as functional for international businesses that wish to hire Japanese employees (Beauchamps 1991). When hiring Japanese college graduates, either in Japan or globally, multinational companies will expect these individuals to be well educated, not merely well selected. This selection process, which has seemingly been so functional for Japan, has much less value for multinational corporations or agencies that expect college graduates to be well educated, not merely socialized. This cross-cultural difference in the expectations of higher education is quite apparent for the unknowing Japanese student who enters a prestigious US university and is shocked at the rigor and demands required. It is not the "Disneyland" experience some expect.

Because increasing numbers of Japanese students will be employed by multinational companies in Japan and because more students will fill positions with Japanese companies in other countries, the modernistic nature of the "salary man" is transforming. Although the economic and educational climates are changing, the Japanese educational system is only slowly responding, despite the encouraging rhetoric of some agencies and intellectuals. Monbusho (1992, 138), for example, recognizes well the need to internationalize Japanese education, not only for economic purposes : "It is expected that Japan should actively take an international role in the field of culture as well."

The modernistic nature of Japanese higher education is beginning to give way to the new ways and influences of the larger global culture. Japanese education is being internationalized, whether the institutions want it or not. As Monbusho (1992, 143) notes, the number of Japanese living overseas for extended periods of time is rapidly increasing. In 1992, for example, approximately 51,000 Japanese school-aged children were living abroad. Monbusho reports as well that during the 1990-1991 school year, approximately 13,000 elementary and secondary aged students returned to Japan to be reintegrated into Japanese schools.

Japanese children who live in another country carry the seeds of internationalization and possess cognitive maps much different from their peers who have stayed at home. Not surprisingly, the different needs and perspectives of these children and their reintegration into the modernistic educational system has become an

"important task for the Government" (Monbusho 1992, 143). Just as the US faces the new economic competition from Japan's industries, Japan now faces a new educational competition to more adequately prepare its children for the needs of the postmodern age. Similar to the problems the US faces with the adaptation of new organizational practices to the mandates of US culture, Japan should consider how its educational system can be reformed in culturally appropriate ways. While each country's educational and economic system offers valuable approaches for adaptation, neither system can be imported without considerable cultural accommodation.

As the new world economic leader Japan should prepare to assume its role in the cultural and social aspects of global leadership. Because education is so critical in insuring this international leadership, we have questioned in this chapter how well the present Japanese educational system is preparing its children and future leaders with cognitive maps appropriate for the new age. By comparison, even though the US now faces increasing economic and educational difficulties at home and in the world marketplace, it continues to exert a pervasive influence through the exporting of culture, knowledge, technology, and ideas. This influence, to a large extent, is attributable to the role the US education and economic systems play in fostering and rewarding creativity and individual initiative in the production of knowledge. An indication of the control the US continues to exert in the production and dissemination of knowledge is reported by the Japanese National Institute of Science and Technology Policy (Niwa et al. 1991), which shows the US accounting for over 50 % of the scientific papers published in the world compared to approximately 7 % for Japan.

While the US may face stiff competition for its manufactured products, its control of knowledge production continues to dominate in the fields of science, computers, technology, communications, transportation, space, military, and, not inconsequential, entertainment. Whereas the Japanese education and economic systems have been quite modern and functional until the present, the burst of the bubble economy and the rapid industrialization of the Asian Tigers (e.g., Taiwan, South Korea, and Thailand) have created a new, postmodern competition for the future. How well Japan is able to adapt its educational system to the needs of the coming information age will affect not only its economic prominence, but its importance as a global leader. In particular, we question how capable the modern structure of Japanese higher education is to provide students with the cognitive maps they will need to find their way in a postmodern future.

References

Altbach, P.G. 1982. Servitude of the mind? Education, dependency and neocolonialism. In *Comparative education,* eds., R.F.Arnove, G.P.Kelly, and P.G.Altbach. New York : Macmillan.

Amano, I. 1986. Educational crisis in Japan, In *Educational policies in crisis : Japanese and American perspectives,* ed., W.K.Cummings et al. New York : Praeger.

Arnove, R.F., G.P.Kelly, and P.G.Altbach. 1982. Approaches and perspectives. In *Comparative education,* ed., R.F.Arnove, G.P.Kelly, and P.G.Altbach. New York : Macmillan.

Beauchamp, E.R. 1991. The development of Japanese educational policy, 1945-1985. In *Windows on Japanese education,* ed., E.R.Beauchamp. New York : Greenwood Press.

Belenky, M.F., B.M.Clinchy, N.R.Goldberger, and J.M.Tarule. 1986. *Women's ways of knowing : The development of self, voice, and mind.* New York : Basic Books.

Best, M.H. 1990. *The new competition : Institutions of industrial restructuring.* Cambridge : Harvard University Press.

Carnoy, M. and H.M.Levin. 1985. *Schooling and work in the democratic state.* Stanford : Stanford University Press.

Carnoy, M. and J.Samoff with M.A.Burris, A.Johnston, and C.A.Torres. 1990. *Education and social transition in the third world.* Princeton : Princeton Press.

Drucker, P..F. 1964. *The concept of the corporation.* New York : New American Library.

Dore, R.P. 1976. *The diploma disease : Education, qualification, and development.* Berkeley : University of California.

Evans, R.Jr. 1991. The contribution of education to Japan's economic growth, In *Windows on Japanese education,* ed., E.R.Beauchamp. New York : Greenwood Press.

Freire, P. 1970. *Pedagogy of the oppressed.* New York : Continuum.

Frost, P. 1991. Examination hell, In *Windows on Japanese education.* ed., E.R.Beauchamp. New York : Greenwood Press.

Giroux, H. 1992. *Border crossings : Cultural workers and the politics of education.* New York : Routledge.

Greenfeld, K.T. 1994. *Speed tribes : Days and nights with Japan's next generation.* New York : HarperCollins.

Jameson, F. 1988. Cognitive mapping. In *Marxism and the interpretation of culture,* ed., Cary Nelson and Lawrence Grossberg. Urbana : University of Illinois Press.

Kempner, K. 1992. Wolves in sheep's clothing : Positivists masquerading as phenomenologists. *Educational Foundations,* 6 : 67-80.

Kempner, K. and M.Makino. 1993. Cultural perspectives on Japanese higher education. *Comparative Education* 29 : 185-199.

Keifer, C. 1974. The Psychological interdebendence of family, school and bureaucracy in Japan. In *Japanese culture and behavior,* ed., T.S.Lebra & W.Lebra. Honolulu : University of Hawaii Press.

Kitamura, K. 1991. The future of Japanese higher education. In *Windows on Japanese education,* ed., E.R.Beauchamp. New York : Greenwood Press.

Lattimer, D. 1984. Jameson and post-modernism. *New Left Review,* 148 : 116-127.

Lynch, K. 1960. *The image of the city.* Cambridge : MIT & Harvard Press.

Monbusho (Ministry of Education, Science and Culture) 1992. Japanese government policies in education, science and culture 1992. MESC 4-9207. Tokyo : Monbusho.

Niwa, F,H., F.Tomizawa, F.Hirahara, O.Kakizaki, and O.Camargo. 1991. The Japanese science and technology indicator system : Analysis of science and technology activities." NISTEP Report # 19. Tokyo : National Institute of Science and Technology Policy.

Reischauer, E.O. 1988 *The Japanese today : Change and continuity.* Tokyo : Tuttle.

Survey and Study Committee for the Financial Base of National Universities. 1991. Interim status report : National university scholars now face the fund problem of education and research, unpublished document. Tokyo : University of Tokyo.

Thomas, R.M. and N.T.Postlewaite. 1983. *Schooling in east asia : Forces of change.* New York : Pergamon Press.

Tokutake, Y. 1988. Education in Japan, Series # 8. Tokyo : Japan Foreign Press Center.

Walters, P.B. 1981. "Educational change and national economic development," *Harvard Educational Review,* 51 : 94-106.

Wexler, P. 1987. *Social analysis of education : After the new sociology of education.* New York : Routledge Kegan, Paul.

あとがき

“翻訳や英語で論文を書くことの難しさ” イタリアの諺に “Traduttori traditori.” “Translators are traitors.” というのがある。「翻訳は困難で、誤解をしやすいし，されやすい。」と言う意味である。

翻訳は、ある場合には比較的簡単で易しいが、ある場合には不可能であると言っていいほど困難である。それが易しいか難しいかは、第一に、訳そうとする言語なり文章の目的による。第二に、どこの国の言語からどこの国の言語に訳すかによって決まる。もしも二つの国の言語が、語源的にも、文法、構造上からも比較的似かよったものである場合、たとえば英語、フランス語、ドイツ語といった三つの言語のいずれかから、そのうちの他の言語に訳す場合には比較的容易であるけれども、日本語と英語のようにいろいろな意味でかけ離れている言語同志の訳は困難である。第三は、急激に変わりつつある言葉を他の国の言葉に訳すことは困難であるがそうでない場合には比較的易しいと言えよう。純粋に技術的な目的のものである場合には翻訳は非常に楽である。たとえば理科、工科系統の論文のようなものの翻訳も比較的容易であるといえよう。このような技術的なものには人間の感情や情緒は含まれていないし、風俗、習慣やその国民固有の心情も含まれていないのが通例である。しかもこういう技術的ものには、それ特有の技術的用語があって、この用語さえわきまえていれば大きな誤りを犯さずに訳せる。

わたしは、アメリカの大学に在学していた頃から日米文化交流に貢献する目的で、日米比較言語、文化、教育の論文を数多く書いてきた。英語が母国語でないものが英語で論文を書くと陰で確証もないままにいろいろと誤解を生むような噂を流す人がいるのも事実である。このようなことを気にしていては、いつまでたっても日本人の英語はよくならないし国際的な理解も得られないであろう。もし、サイデンステッカー氏が、川端康成の「雪国」を翻訳しなかったら日本文学を世界の人々に紹介出来なかったし川端康成のノーベル文学賞も実現しなかっただろう。

以上のように国語や言葉の本質などからみてさまざまな困難を克服しながらも翻訳や英語で論文を書かなければならない。また書く必要があるのである。ここに日本を諸外国へ紹介する必要性と価値が生まれるからである。