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University Entrance Exams: A National Obsession

As long as learning is connected with earning, as long as certain jobs can only be reached through exams, so long must we take the examination system seriously. If another ladder to employment was contrived, much so-called education would disappear, and no one be a penny the stupider.

E. M. FORSTER
Aspects of the Novel

PICK UP any of Japan's national news magazines in February and March and you will find university examinations to be lead stories, surpassing in popular interest for the moment even political scandals, economic problems, and gossip about movie stars. From the end of New Year festivities to the beginning of the new school year in April, an inordinate amount of attention is given to the trials and tribulations of the three-quarters of a million adolescents hoping to enter university. What makes this 1 percent of the population so fascinating is that their individual destinies are being shaped to a remarkable extent by just a few hours of test taking. The competition is severe and the preparations are grueling. Ominous labels have been coined to express this concern. It is the time of the "examination hell" (*juken jigoku*). Students are enlistees in an "examination war" (*juken sensō*). Twelve years of schooling culminate in this moment, which is a crucial turning point in the life cycle of most Japanese. Like other such moments, the whole nation undergoes the experience vicariously each year.

It is midnight. Families, friends, and even interested observers stand shivering in the cold on some campus waiting for university officials to post the names of the successful candidates for admission on large, floodlit bulletin boards. There is much nervous chat-

ter, and the sense of excitement is heightened by the fact so many are braving the cold just to learn the results as soon as possible. The lists begin to go up. Flash bulbs pop, journalists scurry around, and people stand on tiptoe to search for names they know. Shouts of happy surprise are heard. Others remain intently searching, and some turn and silently disappear from the scene. The weekly magazines almost invariably put such a scene on their covers each spring.

Most candidates do not go themselves to see if they have passed, but ask a relative to look for them or pay a small sum to an undergraduate-run business to send the results by telegram. Yet the anticipation, ecstasy, and disappointment written on the faces of the crowd when the names go up epitomize the drama of what in effect is a great annual event equivalent to the baseball championships and the blooming of the cherry trees. Even television crews cover the top university announcements.

The magazine cover photographs deserve closer attention. Almost invariably they are of successful candidates just at the moment of discovery and celebration. Some leap for joy; others display a smile of deep satisfaction; others embrace parents or friends. For them a long preparation is over. Typically, the celebrant portrayed is attractive and well-dressed. Four years of glamorous freedom and a life of achieved high status are before the lucky person. Lurking in the background and a bit out of focus, one can almost inevitably find those who are not celebrating. For them, the struggle to enter a good school goes on. The two figures, one ecstatic and the other crestfallen, belong together. They symbolize in the popular imagination the rewards and suffering Japanese must face in the pursuit of educational distinction, which is followed by a good job, economic security, respect, and status in a technocratic world.

Not every student can attend university—not by any means—and yet the popular dream of almost all parents is for their children to do so. Democratic ideology supports this and makes politicians and educators most reluctant to acknowledge any institutional and individual limits to their dream. The magazines are both reflecting popular interest and sustaining the dream.

Can we in America imagine *Time* or *Newsweek* publishing week after week as many as fifteen pages of statistics on the application levels and results of university entrance exams? These are accompanied by lead articles on the exams and the techniques of prepara-



*Student jumping for joy at being accepted
to Tokyo University*

The cover of a national news weekly shows a student jumping for joy at being accepted—presumably to Tokyo University, for the building in the rear looks like that campus. By the apparent age of the celebrant, he has finally succeeded in passing the entrance examination after a number of tries.

tion that in the United States would be relegated to scholarly journals of education.¹ The statistics reveal the competition rates for universities and departments, and then, when the exam results are in, they document the success rates high schools achieve in applying to virtually all the universities and departments in the nation. However tedious, it is precious information to ambitious parents and, I might add, to the foreign interloper trying to understand Japanese high schools.

The ten or twenty most successful high schools, Nada among them, are regularly highlighted, shrewdly evaluated, and gossiped about. The magazines also discuss the noteworthy characteristics of each year's examinations: Which universities and departments had a surprisingly high or low number of candidates? Which high schools did especially well? What new style of exam questions appeared? What trends will be important for next year? Parents of future applicants, recent university entrants, and a general population fascinated by the drama avidly consume this kind of journalistic post mortem.

A psychology of status and rank, so developed in Japan, animates the discussion. As soon as the University of Tokyo publishes its results, the magazines carry a list of the most successful high schools with an analysis of their ups and downs in past competition. Changes in the ranking are subjected to close scrutiny by these publications, and the principals of leading secondary schools are interviewed by phone. When Nada dropped from first to second place in the rankings in 1977, the analysts, with remarkable astuteness, concluded that this was not really a sign of decline because more Nada students that year were aiming at entering medical departments at other universities. Since medical school competition is generally more difficult than entrance to Tokyo University, they concluded that Nada had retained its crown as the top secondary school in the country. In America, few people have even heard of a Groton or an Exeter, nor do most care about minor details in the performance of these schools' graduates in getting into Harvard.

Great social competition invariably is built on clear, prominent goals. Tokyo University, or "Todai," stands as Mount Olympus, and

1. The class (or honors) lists for Oxford and Cambridge Universities are published in the *London Times*, but this is merely a shadow of the attention showered on Tokyo University students.

ranking starts there. Although only a minuscule number of families has a direct interest, the nation's largest newspapers publish the entire list of its successful candidates. Personal distinction is involved, and the list is important sociological data. For sixty years *Todai* entrants have gone on to run most of Japan's key institutions. Parents of successful candidates are interviewed, and they proudly recount how their son or daughter suffered the grueling work necessary to pass the examination. Did they adopt a special strategy? Did they go to tutoring schools? How many subscribed to magazines designed to help students prepare for the examinations? What time did they usually go to sleep? How did their fathers help? We ask these kinds of questions in the United States of sports heroes and movie stars.

Japanese parents worry terribly about doing the wrong thing when it comes to their children's education, and every scrap of factual information can be useful. This is why articles listing the better nursery schools, for example, attract wide attention; why entrance examinations to some private schools are published verbatim in local newspapers; and why mounds of statistical material on competition ratios regularly appear in popular magazines.

These parents and students who anxiously scan the magazines for information generally suffer enormous tension and an oppressive burden of preparatory work. They stand ready to agree wholeheartedly with any assertion that the "exam hell" must be ended. The same media organizations that sell copy using the annual drama also commission scholars and intellectuals to write essays critical of the system. Like all great obsessions, this one evokes much regret and denial. The media knows how to play both sides of the street. Time and again one reads how examinations are ruining the schools, the young, and Japanese society; how cramming produces warped personalities, crushes enthusiasm, and nips creativity in the bud. One would think education had reached a crisis point, that either the exam system must be scrapped or Japan will lose its humanity and vitality. Yet, ironically, the critics are themselves graduates of the best universities, and their readers are the middle-class parents who will go to extremes to improve their children's performance. Japan's examination hell has been around quite a long time. Hardly a soul in the entire country will say anything publicly in its favor, yet private behavior feeds the competition.

This schizoid quality is a distinguishing mark of most powerful

social syndromes. Calls for reform and desperate effort escalate together. Politicians, educators, and bureaucrats regularly announce that the stranglehold of exams will be broken, yet changes prove ineffectual. Hypocrisy, confusion, and despair mix with the private cynicism.

The cast of stereotypical characters reflects this ambiguity. There is the pushy mother, known as *kyōiku* (educational) *mama*, and the robot-like student with thick glasses who grinds away at books day and night. Fathers just work late. The student, in this case, becomes the hero who through diligence and sacrifice enters a great university and, presumably, goes on to serve the nation with distinction. There is the idealistic teacher who fights the exam system, publicly praised by his colleagues but privately condemned as failing the real needs of his students. And there are athletes who have chosen sports over studies. Japan has no Renaissance men. The institution attracts and repels, rewards and punishes in great measure. Exams have been a major aspect of the Japanese popular imagination since Meiji, nearly synonymous with social success. They epitomize the excesses of the world's most advanced meritocracy.

The Competition

In 1980, for example, about 90 percent of all young Japanese were graduating from high school.² Only 6 percent had chosen to end their schooling at ninth grade, and a mere 4 percent dropped out of high school. A larger percentage of young Japanese were graduating from the twelfth grade than in any other country in the world. Over 65 percent of them had taken a college preparatory course, and even some who finished vocational courses decided on college. You will recall, for example, that some of the students of Sakura Night Vocational School hoped to go to college.

Polls revealed that 80 percent of all high school freshmen had aimed at a higher education.³ Yet by the time for actually applying to university, grades, teacher discouragement, parental attitudes, and family resources dissuaded some students from making the attempt.

2. The main source for statistical profiles of Japanese education is the Ministry of Education (Mombushō). For 1980, the basic publication is *Waga Kuni no Kyōiku Sun-jun: 1980* (1981).

3. See, e.g., the poll published in *Nihon Hōsō Kyōkai* (1975).



Students waiting for a high school entrance exam to begin

Middle school students in Tokyo waiting for a private boys' high school entrance examination to begin. (Courtesy of *Asahi Shinbun*.)

It costs about \$35 just to submit an application to a private university (this is a significant source of income for the institutions), and the costs of actually attending university are high enough to be a serious drain on family finances. Naturally, parents must consider a child's chance for admission and return on the investment. The result of such considerations in 1980 was that 42 percent of all high school graduates took jobs.

The remaining 58 percent of high school seniors decided to apply to one or more institutions of higher learning. There were 590,000 places in higher education available and about 636,000 seniors applying. The fit between the two would have been close except that about another 200,000 students from the class of 1979 and before, those who had failed to enter a university but who had not taken employment, were back taking entrance exams again after a year or more of extra study. These students are called *rōnin*, "lordless wandering samurai." Thus, over 200,000 students would not find a place—one out of every four taking the exams.⁴

Compounding the sense of competition was the number of seniors who applied to three or four schools. In all, some two and a half million applications were received by universities and junior colleges for those 590,000 places. On the face of it, then, the overall competition ratio for a hypothetical average was four to one: four applicants for each opening.

The situation facing those who aspired to a four-year university was especially bleak. There were 412,000 openings and some 452,000 seniors applying, joined by nearly all of the 200,000 *rōnin* returning to try again. Among the seniors trying for the first time, one in three failed to gain acceptance. Many of them became *rōnin*, and thus the pattern continued for another year.

Actual competition ratios vary a good deal from school to school, department to department, and year to year.⁵ Among the four-year universities are some private ones that have only slightly more applicants than openings. These are the very lowest ranked universities. Many junior colleges also take in most applicants. Competition ratios for the very top universities are not necessarily the highest. Many students avoid wasting their efforts on examinations that attract the nation's best prepared and brightest students. Competition actually clusters toward the middle, especially the higher end of the middle. Applicant-to-opening ratios at the lesser national universities, for example, averaged seven to one. At the better private uni-

4. In 1975, e.g., 33 percent of those entering universities had done at least a year of *rōnin* study, according to Fujita (1978). The picture is hardly changed in 1982. The Ministry of Education reports that in 1980 at least 220,000 students, most *rōnin*, were enrolled in *yōbikō*. Reported in "Entrance Exams as Tough as Ever (2)," *Mainichi Daily News*, February 11, 1981, p. 3.

5. Competition ratios broken down by university and department are regularly carried in the national student newspapers *Zenkoku Shingaku Shinbun* and *Jūken Jōhō Pāku*.

versities the ratios were similar. More than eight applications for each position were received at Keio and Waseda, the two most distinguished private universities, and more than half of the successful candidates entering these two schools in 1980 had done at least one year of *rōnin* study. Perennially, applicants to medical departments face the most competitive circumstances. Ratios of twenty to one, thirty to one, and even forty to one regularly arise for all but the very best medical schools. Difficulty is not measured by competition ratios alone. The level or quality of competition is most crucial. Some of the best schools have low ratios, but no one doubts the difficulty of succeeding on their exams.

Applications are made with care, and only the most likely schools are selected. One result of the extensive media coverage is that applicants can seek points of slight advantage. The process is considerably more rationalized than in the United States. With reams of statistical material in hand, students, parents, and teachers are able to scan the entire field and make judgments about where the best chances lie.

Are the choices different for males and females? Only slightly more men than women were entering institutions of higher learning in 1980, a change from the previous decade or two, when men predominated. This shift is largely explained, however, by a particularly rapid growth in the number of junior colleges. Approximately 30 percent of those students going on past high school attend junior colleges, yet 90 percent of them are female. The percentage of women in four-year universities also increased from 8 percent in 1960 to 18 percent in 1980, but this is still quite low by American standards. The fact remains that approximately two of every three females are headed for junior colleges, whereas nine of every ten males are aiming at four-year universities. Furthermore, the percentage of women in the total enrollments of Japan's top public and private universities has remained notably low. Only 7 percent of those accepted at Tokyo University in 1980 were women, and most entered only two departments, literature and education. Kyoto University, number two in Japan, accepted a freshman class containing 8 percent women.⁶ And Keio University enrolled one woman for every

6. These figures come from 1) profiles of universities in the *Zenkoku Shingaku Shinbun*, a newspaper that carries information for students preparing to apply to universities, and *Shukan Asahi* (April 4, 1980), pp. 22–29.

nine men. None of this stems from overt discrimination in the examination or admissions process. There are no quotas or biases in the mechanism, and the examinations are objective and open. Relatively few women apply. In 1975, for example, 210,000 males, but only 81,000 females, applied to four-year universities. The acceptance rate for the females (71 percent) was actually higher than for males (61 percent).⁷

The roots for these male-female differences lie largely in parental attitudes toward a daughter's education.⁸ As our focus narrows to the four-year schools and then to the best universities, we are in fact centering on the institutions that lead to more valuable jobs upon graduation. Men in Japan spend their lives at such jobs; women are not expected to do so and in fact rarely pursue careers. That only male students are intensely supported and pressured to enter a good university, regardless of family finances and the psychic costs, is no surprise. Nothing reflects this better than the fact that about 85 percent of all students doing *rōnin* (a costly burden on parents) are male.

Girls are lucky, people say, because they avoid the exam hell. Only the very best female students allow themselves to consider the best universities as they progress through school. Their parents may even discourage them. Why? Graduation from a top school can hurt a woman's marriage prospects, and most parents see a woman's place as ultimately in the home. It is considered an unwise use of family resources to pay for more than a year of *rōnin* preparation for a girl. Further, over the years of primary and secondary education, parental favoritism and suggestion have widened the academic gap between males and females. Preparation is neither pleasant nor glamorous, and few daughters utter complaints. By the end of high school a significant difference in exam-taking ability has emerged between the sexes.

At Tokyo University in 1980, there were about 13,000 applicants for 3,077 coveted places. This competition ratio of 4.1 is about the national average, but it tells us little. More revealing is that among the successful applicants, 35 percent were taking the test for the second time and 10 percent for the third time or more. The successful

7. Mombushō [1976], pp. 212–213.

8. A poll of 1974 reveals that 99 percent of parents plan for a university education for their sons. For daughters, 13 percent plan only for high school, 30 percent for junior college, and 56 percent for university or beyond. Nihon Hōsō Kyōkai [1975].

candidates came almost entirely from only the several hundred best public and private high schools. Twenty-nine percent came from the perennial top ten and two-thirds from but fifty elite schools. Nada headed the list with 131 entrants. Most successful candidates had attended cram schools and had averaged about five hours a day of homework for at least the three previous years.

Is such effort worth it? Obviously, many Japanese think the answer is an emphatic "yes," at least as far as young males are concerned. The reason is not the quality of education acquired, but the quality of the employment prospects awaiting Tokyo graduates. That is the real prize.

The Rewards

The precise and elaborate ranking of universities by the measure of exam competitiveness correlates with the ranking of jobs to be gained four years later.⁹ Tokyo University is the major gateway to top jobs. It stands at the top of the employment pyramid, and any analysis begins there.

The reader unfamiliar with Japanese employment must keep in mind that in Japan, the university graduate taking a good job hopes and expects that his career will remain with that company or government entity until retirement. There is no developed job market for executive, managerial, or white-collar talent. Some of the well-educated do change around, and there is considerable transfer within any organization, but promotion and career success depend heavily on rising within the organization with which one starts. This fact makes the first job out of school far more important in Japan than in the United States or Europe. Proving one's worth is important for promotion to top positions within any organization, and getting oneself on the first rung of a desirable career ladder is a one-shot matter in Japan that is heavily dependent upon the status of the university one is just leaving. The right organization is defined by its future prospects and reputation, both of which are factors well correlated with material rewards, personal power, social prestige, and

9. Another measure of the value of university entrance is the price paid for copies of the test leaked out before exam day. The incidence of such cheating is rare, but the temptations are great at medical schools and elite universities. In 1979, copies of the Waseda University School of Commerce exam sold for \$40,000 each.

work satisfaction as the Japanese see it. Graduates are, in fact, choosing lifelong institutional affiliations, not just specific jobs. To join a top institution one must come out of one of the top universities, and so forth on down the line.

Companies naturally try to hire those they perceive as the most talented individuals. Many of the country's top firms simply do not interview except at the top schools. And because there are no employment-oriented professional schools in Japan to provide a second chance to prove one's academic worth, the university entrance exam is *the* critical point of selection between high school and employment. Positions on the track to high government responsibility go to graduates capable of passing special employment examinations. Some latitude might be expected here, yet graduates of top universities do exceptionally well, and again Tokyo University dominates.

Having entered the top institutions, do the graduates of elite schools continue to rise? News magazines periodically survey the largest firms, ascertaining the educational background of top executives or newly appointed middle managers in order to gauge the ongoing predictive strength of top university affiliation. In just two years, in four weekly magazines, fifteen such articles appeared with titles like "The Universities That Produce the New Middle Management," "Top Corporations and the Reality of Educational Background," and "The Top Twenty Universities in Terms of Company Presidents Produced." The material presented is factual and impressive. The results of one poll on the university background of top company presidents, for example, reads:

Tokyo University	357
Keio University	133
Kyoto University	125
Waseda University	92
Hitotsubashi University	79
Kobe University	53

Tokyo, from which about one in every hundred university students is graduated, can claim one-third of all large company presidents.¹⁰ A survey of one hundred major companies listed on the Tokyo Stock Exchange in 1978 found that one-quarter of all chief ex-

10. *Shukan Yomiuri*, June 24, 1975.

ecutive officers were Tokyo graduates.¹¹ Invariably, the other schools listed are Keio and Waseda, the top private schools, and a set of the leading national universities. Other surveys produce much the same results regarding middle management positions. Take for instance one focused on the educational background of section chiefs in Japan's largest corporation, Japan Steel:¹²

Tokyo University	98
Kyoto University	23
Tohoku University	23
Kyushu University	23
Waseda University	19

At Sony Electric, famous for its self-proclaimed policy of ignoring educational background for promotions, the list reads:

Tokyo University	20
Osaka University	9
Yokohama National	7
Kyoto University	5
Kyushu University	5
Tohoku University	5
Keio University	4

Again, except for Keio and Waseda, all the schools represented are national universities. Together these elite schools account for about 10 percent of Japan's university population. The sad fact is that Tokyo graduates who fail to reach the top or near-top are subjects of much gossip, both empathetic and scornful, so great is the built-in expectation that they will do well after graduation.

Top jobs in the corporate world correlate closely with university background, but the national bureaucracy, including nearly all ministries, is positively dominated by Tokyo University. This has been true for eighty years. Middle management in the bureaucracy also comes largely from Todai, and 50–75 percent of all executive-oriented starting positions in most ministries go to its graduates.

11. *Business Community*, 18 (Spring, 1978), quoted in Beauchamp (manuscript).

12. *Sandai Mainichi*, March 16, 1976. Compare this with the findings of a 1981 Standard and Poor's survey: of 55,834 American executives, 1,827 (3 percent) and 1,494 (2.6 percent) had graduated from Yale and Harvard, respectively. "Executives and the Colleges They Went to." *Christian Science Monitor*, September 8, 1981, p. 19.

Typically, they improve their hold with promotion. A survey of all ministries and agencies in 1978 (Table 5) found that 62 percent of the executive positions were filled by Tokyo graduates.

In the Ministry of Education—explicitly assigned the task of disassembling the elite university influence over exams and jobs—sixteen out of eighteen of the top positions were filled by Tokyo University graduates in the mid-seventies. The national police headquarters, the public corporations, and even some prefectural governments follow the same pattern. Relatively speaking, business is less elitist than government, and small business is less elitist than large business. The pecking order of status among institutions is roughly proportionate to the number of elite university graduates, especially those from Tokyo. And finally, the faculty of Tokyo University is made up almost entirely of its own graduates.

The significance of the educational hierarchy does not end with elite jobs. Employment prospects are allocated by school rank down through the entire spectrum of middle-class positions. All companies, even modest ones, rank universities and high schools when hiring new employees.¹³ Differences in the quality of candidates are presumed on the basis of school rank, which of course ultimately affects the entrance competition. For students of Otani and Okada, who have no thought of applying to Tokyo or the other elite national universities, there is still a very clear set of priorities among the middle-level private universities they are considering. Small gradations in their relative difficulty are appreciated, and a decision to do an extra year of *rōnin* study in order to make a try at a higher ranked school is not unusual. Four years later that extra year is likely to pay off in better job opportunities.

Entrance exams thus obviously serve as crucial screening devices for employers. They sort the nineteen-year-old population into an extensively differentiated hierarchy of presumed intellectual ability and dedication.

Not going to college means beginning work with an almost irremediable disadvantage. Going back to school is not an option, and

13. This is documented in a general manner by surveys of the Ministry of Labor [Rōdoshō] contained in its annual, *Rōdō Hakushō*, and specifically by my fieldwork in several Japanese companies and my work with high school career guidance counselors.

Table 5
Percentage of Officials Ranked Section Chief or Above in Ministries and Agencies of the National Government Who Are Graduates of Tokyo University

Office	Percentage of Tokyo University Graduates
Ministry of Finance	88.6
Ministry of Foreign Affairs	76.0
National Land Agency	73.5
Autonomy Agency	70.5
Ministry of Transportation	68.5
Ministry of Construction	67.5
Ministry of Agriculture & Forestry *	64.7
Ministry of International Trade & Industry	63.7
Ministry of Labor	61.7
Ministry of Justice	60.7
Economic Planning Agency	60.0
Ministry of Education	60.0
Defense Agency	57.9
Environment Agency	55.9
Ministry of Postal Services	50.8
Ministry of Health & Welfare	48.6
Prime Minister's Office	45.9
National Police Agency	44.9
Science & Technology Agency	44.9
Administrative Management Agency	40.5
National Government Average	62.3

SOURCE: Data from "What Does A University Mean to the Japanese," *Business Community* 18 (Spring 1978), p. 56.

* The figure for the Ministry of Agriculture and Forestry includes the Forestry Agency and Food Agency.

rarely will even the most talented high school graduates gain promotion above the university group in any sizable organization. Not long ago many very able high school graduates were attaining high rank in companies, but today, with more than half of all males obtaining some sort of higher education, a high school degree looks very insignificant.

Education and jobs are closely tied in every industrial country, but the Japanese situation has several important characteristics. As already mentioned, the weight of education in determining careers is increased by the one-company, one-career pattern. In management and technical areas, mobility and lateral opportunities are minimal. Movement out and up is rare in the case of most white-collar workers. Second, the rankings of universities in Japan are surprisingly sharp. One standard, entrance exams, makes this possible. By comparison, in the United States, regionalism in choice of schools, the unevenness of student quality, and admissions criteria that include many significant factors other than tested ability all contribute to the inclination to recognize four or five large tiers among universities but to remain vague about the matter and to withhold judgment when it comes to individuals. We acknowledge elite schools and distinguish educational status, but there are so many exceptions and many extenuating circumstances that our rankings do not influence the allocation of jobs in anywhere near as profound a manner. We also look at grades in college, a factor of little significance in Japan, and we have graduate schools where the deck is reshuffled.

Most European school systems, by comparison, involve considerable early tracking. Educational achievement levels and jobs are sorted out for most young people starting much earlier, and the entrance competition for universities involves a much smaller proportion of the total population. Only Japan and the United States take all willing students right up to the point of applying for higher education.

Japan is distinguished among industrialized societies by a system that retains the hierarchy and government-subsidized qualities of an elite higher education originally constructed on the nineteenth-century European pattern while expanding educational opportunities American-style in the postwar period. A hierarchical, ordered mass education has evolved. The expectation of lifetime employ-

ment gives entrance exams a weight and a broad currency that is particular to Japan. It must also be recognized that the Japanese are a highly achievement-oriented people who have long been encouraged to view education as a crucial avenue for personal advancement. A potent mixture results when the Japanese national character responds to the sharply drawn system of incentives and penalties presented by postwar education.

The Questions

The student caught in this crucible must concentrate on just one thing: preparing to answer particular kinds of questions. The examinations given by universities constitute an unintended cryptographic code by which social structure and personal ambition are translated into the imperatives of educational preparation. If entrance exams centered on musical skills, everyone would study music. If they were to measure manual dexterity, hand exercises would become enormously popular. What they do in fact measure is important for us to understand.

The only nationally standardized examinations, comparable to our Scholastic Achievement Tests, are conducted by private companies for the purposes of giving high school students practice in test taking and allowing them to see how they stack up against each other. Each university writes its own examination and offers it once a year on its own campus. Examinations last two days. The national universities have just begun (in 1979) jointly giving a standard screening examination. Those successful in this test can then go on to the examination of a particular national university.¹⁴

Hundreds of separate entrance examinations are given on campuses all over the country in February and March. A student cannot apply to more than two public universities because their exams are offered on only two occasions. The schedule for private universities is wider, but the fact of separate examinations still greatly constricts

14. The screening test (*kyotsuichi shiken*) serves only to qualify students to take particular university exams; those that pass the screening test must still take the entrance exam of a specific department. This test could be the foundation of a single national entrance exam someday, but it is too soon to assess its impact. In 1979, 341,000 students took the test to qualify to apply for approximately 96,000 places in national and other public universities.

the field of choice. Application to several departments of the same university is generally ruled out. Considerable care and planning is thus required in the application process.

Examinations would not be so singularly critical if other criteria were used in the admissions process. Only a few private universities do this and only in a minority of cases. Neither teachers' recommendations, nor grades in secondary school, nor extracurricular activities, nor personal character, nor special talents contribute to acceptance by Japanese universities. A small percentage of places in some departments of some private universities, are reserved to admit candidates by teachers' recommendations. But no student dares to count on this. In Japan, how one does during two days of answering questions makes all the difference. It is the sole and final measure of academic accomplishment.

Entrance exams have two facets: a compulsory part and an elective part. Each department specifies for its applicants what choice they have. Topics such as math and ancient literature are divided into several degrees of difficulty, with departments requiring a higher degree of difficulty when the subject is particularly relevant. The compulsory subjects are math, English, and Japanese. Science, medicine and engineering students must elect one social science topic for testing and are required to be tested heavily in math and science. About half of their total score will come from these two subjects. Humanities, education, social science, and law applicants are required to take the full battery of tests in social studies and Japanese but are examined in only one science of their choice and are allowed to skip the most difficult math section. In sum, all students must concentrate on math, English, and Japanese, and in addition they must specialize to a degree in either science or social studies, depending on their career inclinations. It is not possible to change departments once accepted by a university. Changing universities means beginning as a freshman all over again.

The exam questions are easily graded, as might be expected. Short-answer and multiple-choice questions prevail. Few, if any, essay or interpretive questions appear. Foreign language composition and oral skills are not tested. Nor are intelligence quotient kinds of questions to be found. Japanese universities have never made a serious effort to judge a candidate's raw aptitude for learning. They want to know how much has actually been learned and how well

information and theory can be applied to problem solving. Emphasis is on mastery of facts, control over details, and practiced skill in the application of mathematical and scientific principles. As most anyone with experience in exam taking realizes, some forms of learning and knowledge can be tested with precision and some are measured inadequately by the inherent nature of virtually any question-answer approach. Science and math fit the short-answer mode comfortably, humanities and social sciences do not.

Distortions are produced by any examination process, but in Japan, because of the great competitive pressures to prepare, the distortions are magnified. No matter how difficult or obscure questions become, the enterprising and brilliant students will master them. Such distortions flow back through the whole educational system, as parents and teachers respond to shifts in the nature and focus of exam questions. Of necessity, exams are based on the public school curriculum. Without a nationally standardized curriculum, entrance exams of the Japanese kind would be neither fair nor really possible. Some alpha factor of extra difficulty, reflecting what the faculty feels a well-prepared student should know, is added to the exam questions. The alpha factor is naturally greater the higher one goes up the university ranks. Supposedly, it is the faculty's way of sorting the sheep from the goats. The alpha factor makes a real difference on exams to the elite schools.

The process of making examinations is not subject to public scrutiny. Nor is it monitored by educational specialists. Rather, it seems to result from a mix of traditional practice and conventional academic insight. Secondary teachers are not called in to explain what they have been teaching students, as is done with SATs in the United States. Rather, the standardized high school textbooks are consulted. Most central to the process of making up exams today is last year's examination for the same department. Basically, each year a new set of questions is ground out on the old model.

With so much riding on examinations and with so many years of preparation invested by each candidate, universities recognize a responsibility to make no sudden changes. They announce plans for revision sometimes as far as ten years in advance. If a new economic theory or new questions in microbiology are going to be included, the groundwork for such learning must be laid in junior high school. If the correct answer regarding the causes of World War II changes,

then students trained to give the old answer should not be penalized. For reasons like this, the reform of the content of entrance examinations moves with glacial slowness. Each announcement of an intention to change the exams significantly is met with near panic by parents, teachers, and students. All fear that a disadvantage will be created for those who have been diligently preparing for the wrong questions. The content of examinations is, indeed, a sensitive public issue.

Following is a typical question that actually appeared on the Kobe University examination in 1974.¹⁵ Kobe is an excellent national university just a notch or two below Tokyo. The question is from the social studies section.

Select the appropriate answer for each numbered blank space from the list that follows the passage below. Fill in the dates directly.

The philosophy that arose in ancient Greece had an enormous influence on subsequent human thought. The earliest form, (1) _____ philosophy, arose in the (2) _____ century in the (3) _____ region. Liberating itself from the mythological approach to natural phenomena, this philosophy aimed to explain the fundamentals of nature in a rational manner. (4) _____, who explained the origin of things to be water, and (5) _____, who treated the basis of matter mathematically, were representative scholars of the age. Following the war with (6) _____, democratic government was implemented with Athens as its focal point, and a school of teachers, the (7) _____, arose to give instructions to citizens in the arts of public debate. This development began the division of philosophy into component fields. As can be seen in the famous phrase, "Humans have many ways of measuring things," of (8) _____, the existence of absolute causality was denied by the assertion of subjective understanding. (9) _____ offered counter-arguments to this in his teaching. Known for his special questioning of students as a way of teaching them to understand the truth, he was misunderstood by his society and sentenced to death. One of his students, (10) _____, recorded his words and also bequeathed to the world a theory of idealism and a treatise on political utopia, and another student, (11) _____, drew together and synthesized all of existing Greek philosophy, for which he is now regarded as the figure representative of Greek learning at its zenith. In the latter half of the (12) _____ century, Hellenism arose, and, reflecting the decline of the democratic independent city-state, philosophy shifted from being primarily part of the education of a democratic citizenry to being part of the tendency to seek psychologi-

15. Questions are quoted from a book entitled *Kobe Daigaku*, published by Kyōgakusha (1974), one of an extensive annual series on the entrance exams of over 350 universities.

cal solace and contentment. The (13) _____ school, which explained matters in terms of pleasure and pain, and the (14) _____ school, which sought to eliminate appetites, were characteristic of the age. Both subsequently spread to the aristocracy of ancient Rome, where Emperor (15) _____, who wrote his confessions, and the philosopher (16) _____ were representative figures.

- | | | |
|-------------------|-----------------|------------------------|
| a. Academia | n. Dorian | aa. Enlightenment |
| b. Aristides | o. Pythagoras | bb. Natural Philosophy |
| c. Aristophanes | p. Plato | cc. Absolutism |
| d. Antoninus Pius | q. Hesiod | dd. Stoic |
| e. Euripides | r. Peloponnesus | ee. Socrates |
| f. Cicero | s. Macedonia | ff. Thales |
| g. Chrysippus | t. Mycenae | gg. Hadrian |
| h. Constantine | u. Attica | hh. Phaedrus |
| i. Natural Law | v. Aristotle | ii. Protagoras |
| j. Existentialism | w. Archimedes | jj. Persia |
| k. Seneca | x. Ionia | kk. Polybius |
| l. Sophists | y. Epicurean | ll. Marcus Aurelius |
| m. Solon | z. Xenophon | mm. Laconian |

Answers:

- (1) i, (2) 6th B.C., (3) x, (4) ee, (5) o, (6) ii, (7) l, (8) hh, (9) cc, (10) p, (11) v, (12) 4th B.C., (13) y, (14) dd, (15) kk, (16) k.

I selected this question because it is about a time and place in history supposedly more familiar to Western than to Japanese students. Questions related to Chinese and Japanese history also appear, of course, but for those of us without the necessary background they are more difficult to evaluate. The style of the questions does not show geographical variation.

How many American high school seniors would even want to attempt answering this question—one about their own tradition? Very few, of course. Our education is not geared to this sort of testing, even when it does take up ancient civilization as a subject. The American sense of education rebels at the thought that the way to learn about Greek thought is to master the names, dates, places, eras, schools of philosophy, and philosophical lineages involved. We want to focus on the essence of what we think the Greeks valued— independence of thought and rationality—two items that tests do not reliably measure.

For Japanese such facts are the foundation for further learning and the essential equipment of an educated person. Perhaps more to the point, they can be tested objectively. To the contemporary Western educator, the debates among Greek thinkers and the differences between their approaches are more interesting. We would pursue this angle in class discussions, attempting to show the relevance of such debates to contemporary problems and issues. If there were time, we would also dig into the logic used by various schools to train minds in analytic thought. Precious little of such an approach would help a Japanese student prepare for a question like the one above.

The approach of Japanese high school textbooks is always neatly mirrored in the exam questions. Greek thought, for example, receives an average of ten pages out of 220 in the various texts for the year-long required course "Ethical Thought and Society." These pages read exactly like an encyclopedic entry on the subject. The authors skim from topic to topic at a rapid pace in order to introduce as much as possible in a limited number of pages. The result is a high density of items to memorize, from ten to twenty per page, but no textual material to chew on and no real basis for class discussion or individual speculation. Greek schools of thought, for example, are typically encapsulated in a sentence. The pace of the course, furthermore, precludes exploring in any depth. This course covers all of Western and Eastern philosophy and religion in one year (from Moses to Dewey in the West and from Confucius to Nishida Kitaro in the East). A little bit of time is spent on the place of ethical thought in society and culture. But because speculative issues do not appear on entrance examinations, this section of the textbook receives little attention from students and most teachers.

The encyclopedia quality of social studies examinations is not in itself the heart of the problem. A degree of such information is necessary as the foundation for deeper learning. The problem arises from the excessive amounts of information required to do well on exams. One gets the distinct impression that professors, themselves often masters of the encyclopedic approach, take particular pride in their ability to concoct exams that are notably difficult, for this enhances their school's and their own status. If distortion begins from the fact that university entrance depends solely on objective examinations, it is greatly magnified by the excessive difficulty generated in narrow realms of learning.

Consider a question on European geography from the same examination:

Fill in the blank spaces in the paragraph below.

The Rhine, one of the most important rivers in Europe, rises from the Alps and flows into Lake Boden. From there it runs west, cutting through the Jura mountain range and turns north in Basel, a city in Switzerland. At Basel, the borders of West Germany, (1) _____ and Switzerland meet; the national railroads of these countries extend their roots into this city. There are three major national railroad stations. The Rhine turns north from Basel and the view suddenly opens up before it. This indicates that the Rhine has entered (2) _____, a long and narrow plain 30 km. wide and 300 km. long bounded by (3) _____ on the east and the Vosges mountain range on the west. The surrounding area consists of forests, swamps, and (4) _____.

In the plain, which is made of rich (5) _____ earth, the main crops are wheat and corn.

Along the mountainside, splendid (6) _____ follow the course of the river. Around Mainz, the riverbed starts narrowing and the mountains on both sides form a sheer rise. Along the mountainside, vineyards still continue; on the hills old castles appear. The Rhine cuts across the Rhine Range, which is made of schist, enters a plain around Bonn and finally drains into the (7) _____ in Holland.

The ratio between the maximum and minimum water flow within a year differs in the upper stream and the lower stream. The ratio is large in the upper stream beyond Basel; in Basel it totals fourteen meters; in the lower stream downward from Basel the annual fluctuation gets smaller; and farther down from Cologne (Koln) the flux tends to be almost constant.

The Rhine is also an important river from an economic viewpoint. (8) _____ and steel are transported in flat-bottomed black ships. The Rhine is (9) _____ on which ships flying the flags of many nations pass.

The river is connected with the Mediterranean area through (10) _____ and with the district of Paris through (11) _____. The Rhine is the most important main artery of Western Europe's river transport system, one that connects Switzerland, eastern France, part of West Germany, and Holland. Ships up to two thousand tons can actually go up the river as far as Basel. The major river ports are (12) _____ in Holland; Duisburg, Mannheim, and Ludwigshafen in Germany; Strasbourg in France; and Basel in Switzerland.

Answers:

(1) France, (2) the Rhine Trough or Graben, (3) the Black Forest, (4) riverside terraces, (5) brown, (6) vineyards, (7) North Sea, (8) coal, (9) an international river, (10) Rhone-Rhine Canal, (11) Marne-Rhine Canal, (12) Rotterdam.

Clearly, the realm of practical knowledge has been left behind here.¹⁶ Details are required of the kind that will probably never again be needed once the candidate is safely past the gates of some university. In fact, much of the social studies part of entrance examinations seems like nothing more than a giant trivia contest compiled by scholars instead of popular culture freaks. Is it surprising that many Japanese adults have an almost obsessional interest in and capacity to master facts? But the youthful energy spent in developing this skill is appallingly great.

Compared with social studies, the math and science part of the test is quite straightforward and impressive. The questions are difficult, to be sure, but the objective short-answer approach fits the pursuit of these subjects. Theory, problem solving, and logic are central to most questions, and the exam system buttresses this emphasis in Japanese education. The level of accomplishment expected on science and math questions is probably roughly equivalent to what is taught to second-year science and math students in the best American universities.

The English section of the entrance exams is regularly criticized by Japanese and foreigners, either for the slightly archaic constructions and vocabulary put there by English literature professors whose specialties are not the modern period or for the drawing of a right/wrong distinction between two usages that seem equally correct to native speakers. Although I encountered fewer of these faults than I was led to expect, I found high school teachers at Nada and other top schools preparing their students to handle archaic constructions. It is also remarked that to do well a student should digest a small dictionary of English vocabulary. Words like mediate, midday, folly, portable, bough, spectacle, and wrenched appear on the Kobe University test. Yet, as we would expect of a nation seeking information from the world, the greatest stress is on comprehension. Students are asked to translate sentences of the following sort:

Stripped to their essentials, man's major problems have always hung on the necessity of making adjustment to the irresistible force of change.

16. It is, however, more sobering to read about a 1974 survey of geography knowledge among American high school seniors undertaken by the Educational Testing Service for the U.S. Office of Education, which found that 41 percent could not locate Egypt on a map and only 54 percent correctly chose the USSR as the country located in both Europe and Asia.

Or,

With the continuous decrease, during the past few decades, in the length of the working day, recreation, or leisure time activity, has become a social problem of vital importance and one that has engaged the interest of many investigators.

Some attention is also given to colloquial English. Here the level of difficulty matches what might be expected of a moderately educated American high school student:

Fill in the blanks with the word appropriate to all three sentences under each number.

1. His folly has () about his ruin.
If children are badly () up, they don't know how to behave.
The sad news () tears to her eyes.
2. Father () up smoking.
The ice () way and they fell in the water.
The plants () in to the cold weather.

A most notable point is that neither spoken English nor an ability to express oneself in the written language is tested.¹⁷ The fact that most educated Japanese can read English with amazing skill but hardly speak a word follows from the nature of such exams.

The Business of Cramming

The source of the questions considered is a 200-page paperback entitled *The Kobe University Examination: Questions and Answers*, published commercially on an annual basis as part of a series that covers the exams of over three hundred fifty universities. In addition to the questions and answers for the preceding three years, these books outline in detail how the types of questions and the emphases have shifted recently and suggest appropriate study strategies for each university. This is but one of many commercially distributed study aids. So rich, in fact, are the products available that 20–40 percent of the floor space of bookstores frequented by students is devoted to exam-oriented materials.

Cramming is big business in Japan, and many firms compete in a large and hungry consumer market. Practice test books, invariably thick, are some of the most rudimentary items offered. Comprised

17. Some universities have added a small foreign-language and comprehension section using tape-recorded spoken English.

of questions borrowed from past exams, they allow candidates to test themselves to their hearts' content in the privacy of their own homes. Books of facts that regularly appear in questions, all kinds of chronologies, vocabulary lists, catalogs of common mistakes, and other guides to short-answer test taking also abound. For sale are flash cards, pocket-sized books of facts that students can pull out and use on buses or while waiting their turns at bat, study hints illustrated with humorous cartoons, and even high-minded books preaching the need for planning and persistence. The commercial prospects inspire great ingenuity. Browsing in bookstores peddling these products is a popular pastime for many high school students. Pursuing the equipment of competitive preparation and glancing through guides to colleges fascinates those caught in the exam obsession.

One small but entertaining illustration of the general trend in this market is the student desks on sale in department stores. The deluxe models, which cost over \$500, have built-in alarm clocks especially equipped with timers for speed tests, high and low intensity lights, swivel executive chairs, globes that light up, and in one case even a built-in calculator. That may seem a bit much even to most Japanese, but the sale of special educational equipment—from children's microscopes to butterflies ready for scientific mounting—is a regular feature of Japanese department stores.

It is estimated that the sale of study aids and equipment has recently grown into a billion-dollar annual business, thanks to the growth of university aspirations and the prosperity of Japan's middle class.¹⁸ With over three-quarters of a million students applying each year and several million just a few years from taking entrance exams, the market is large. Almost all candidates are likely to buy at least a few study guides.

There has also been a national boom in practice tests (*mogi shiken*) and the related service of computerized counseling. Until the late sixties, before public high schools were committed to downplay exam preparation, boards of education and high schools administered general practice tests modeled on university entrance examinations. This was done to measure student ability and provide guid-

18. See *Nihon Keizai Shinbun* (April 16, 1974), *Osaka Shinbun* (December 17, 1974), *Chubu Keizai Shinbun* (October 30, 1974), *Nishi Nihon Shinbun* (July 26, 1974), *Nikkei Sangyo Shinbun* (April 16, 1974), and the *Oriental Economist* (July 29, 1978) for articles on this industry.



Students taking a practice examination

High school students taking a practice exam offered by a private company. Typically, students take these exams at least three times during the year prior to making application to universities. The companies that give the tests provide detailed feedback on what to study and where to apply.

ance in the application process, as well as to give students practice in taking examinations. All this came under a cloud of disrepute during the late sixties, in the era of social criticism and student radicalism. Suddenly private testing companies, which had been offering practice tests, experienced rapid increases in the number of subscribers to their services. Nearly all high school seniors aiming at college now subscribe to this service.

Taking tests is obviously something of a learned skill: presumably, the more one practices, the better one becomes. High school seniors typically take two or three of these tests prior to making their applications, and *rōnin* students, who do not have teachers monitoring their progress, typically find it valuable to take a practice test every month. Test companies have sophisticated computer programs that analyze individual test results, indicate the types of mistakes made,

and point out areas requiring the most study. The diagnostic possibilities are probably only just beginning to be developed. Because so many candidates now take these practice tests, they are the most reliable data bank against which to evaluate a student's chances of entering any particular university. The subscriber routinely receives, along with his test results, a statement of the probabilities of acceptance to any of the schools under consideration.

Even greater growth has come in the business of cram schools (*juku*) which offer supplementary education after school.¹⁹ A 1976 poll of thousands of Japanese children revealed that 60 percent of the urban student population in grades seven, eight, and nine were enrolled in a cram school or were being coached by a private tutor.²⁰ Further, the poll showed that 40 percent of all fourth, fifth, and sixth graders in Tokyo were going to a *juku*. And one in ten of the country's high school students was shown to be attending *yobiko*,²¹ the advanced analogue of *juku*.

These tutoring establishments are diverse and interesting. Some belong to franchise chains, owned by large companies, that enroll thousands of students. So lucrative and flourishing was the business in the mid-1970s that a movie company, several publishing firms, and a department store all entered the market to set up their own franchise systems.²² Most cram schools are quite small, however, typically run at home by housewives and former teachers. Many university students who contract their services to *juku* also make money on the side tutoring children privately, often in conjunction with some agency. Nine percent of the middle school students in Tokyo have private tutors.²³ In *juku* the focus is high school entrance or, in the case of *juku* for upper elementary school students, entrance exams to the elite private schools that admit students in seventh grade, as Nada does.

The chains and some of the smaller *juku* try to develop distinctive teaching qualities. Each seeks to make its atmosphere and program



Cram school

A cram school (*yobikō*) in Tokyo that specializes in English instruction. Note that the great majority of students here are boys, as is typical of supplementary education above the ninth grade. (Courtesy of *Asahi Shinbun*.)

more effective, and it seeks public notoriety to ensure a flow of applications. Some have elaborate teaching devices, others continually give tests, and some go in for a psychological approach close to that of the United States Marine Corps. As might be expected, the larger cram schools advertise the number of their clients who successfully enter Tokyo and other top universities. Some cram schools target particular schools and even departments in their search for a special segment of the market.

Private tutors and neighborhood *juku* have been around for a long time. Special schools for *rōnin*, where they prepare while waiting for another chance at the examinations, have also been part of the general education scene for quite a while. But private academies that focus on fulfilling the tutoring function on a sizable scale, with the sophisticated special methods and equipment made possible by large organization, are a development of the late sixties and seventies. In effect, the growing demand for supplementary education to help children get past the examinations has fostered new mass-production techniques and new, more competitive approaches to the matter of preparation. One franchise system centered on math claims to be

19. English-language articles on cram schools include Kondō (1974), Riggs (1977), and Rohlen (1980). In Japanese, see Endo (1975) and Maimichi Shinbun Shakaibu (1977).

20. Mombushō (1977). A more recent survey by a private research organization found three-quarters of Tokyo's fourth, fifth, and sixth graders going to *juku*. *Mainichi Daily News* (February 12, 1981), p. 3.

21. Mombushō (1976), p. 59.

22. *Nihon Keizai Shinbun* (April 16, 1974).

23. Mombushō, *Daijin Kanbu Chōsa Tōkeika* (1977).

reaching over three hundred fifty thousand children.²⁴ Some of the smaller schools are so intense as to require attendance of more than twenty hours a week, plus most vacation time.²⁵ The top *juku* have entrance exams themselves and are rumored to be more crucial to success than regular school. With popular interest high, parents cannot ignore the cram school phenomenon, for it could mean the difference between success or failure. No proof exists that cramming helps, but exam competition and anxiety about what the competition is doing drive the market. Most parents deeply regret sending their children to *juku*, appreciating full well the loss of fun and innocence involved, but they fear their children will lose out in the race without such extra stimulus.

This phenomenon illustrates better than any other the potential for escalation in what could be termed the university entrance arms race.²⁶ The extent to which some will go in order to prepare is awesome. And the extent to which some parents will encourage or permit the sacrifice of time and money to this undertaking is truly frightening. What Americans might regard as the lunatic fringe—students memorizing whole English dictionaries or doing seven hours of preparation a night for a year—actually sets the pace in this sort of competition. Moderation is a losing strategy as long as entrance examinations measure the gross absorption of knowledge and the perfection of problem-solving and test-taking skills.

Schools and education officials have attempted to restrain the inclination to excess. They regularly condemn cram schools and, as we have noted, they ended public practice tests. Excessive concern with exams has been highlighted as a major national problem. But public school restraint has only created a vacuum in which the cramming business has expanded. Keen entrepreneurial instincts are now shaping and further intensifying the competition, and the majority of parents are going along with this trend.²⁷ Despite the

24. *Oriental Economist* (July 29, 1978).

25. *Maimichi Shinbun Shakaibu* (1977).

26. I might add that one does not regularly hear occupations discussed between adults and youngsters, as is the custom in the United States. Students learn to aim at universities more than at archaeology, marine biology, the legal profession, and the like.

27. It is interesting to note in this regard the debate in the United States surrounding claims that special cramming can improve SAT scores. In Japan, such a debate would be very widely followed, and the burden of proof would lie with those who would deny the claim. In the United States, little popular interest has been aroused by the issue.

high quality of public schools, education expenses are a large part of most family budgets, and the investment of time and money in preparation at one stage compounds the incentive to protect the investment at the next stage. Captives of their own ambitions and anxieties, parents and precocious scholar-gliadiators cause the new "exam industry" to thrive.

Summary

Institutions develop, are molded, and survive largely in response to forces in their social environment. The social environment of post-war Japanese secondary education has been dominated by university entrance examinations. What was an elite phenomenon three decades ago has now become a national preoccupation. We have gained some sense of the breadth and intensity of this phenomenon by noting such manifestations as the extraordinary attention it receives in the media, the undeniable employment rewards that success brings, the readiness of so many young men to become *rōnin*, and the spectacular development of the cramming business.

High schools can only be understood in the context of the fundamental realities that direct the lives of their students. In Japan, for more than half the students, examinations are a central focus of their existence. For Nada, Okada, and Otani students, the priority of exam preparation is quite clear, and their teachers cannot but respond to this imperative. Whatever original ambitions for university may have been held by the vocational students of Yama and Sakura have been considerably blunted. They have stumbled on exams already and have been judged academically below average, so the university exams are not a motivating goal, but a rather cruel mirror reminding them of their inferior studies. The vocational schools themselves also suffer from a form of second-class citizenship, stemming from the nonacademic nature of their courses.

The bifurcation into different paths to adulthood for boys and girls is also dramatically advanced by choices made about educational goals and the appropriate amount of exam preparation. Despite coeducation and equal opportunity, a major separation of the sexes takes place during high school. This separation is not intended by educational policy but occurs as a response to the intense competition to enter universities.

The existence of most American high school students is shaped by

a significantly different reality. University entrance exams are of crucial concern to some American youths, to be sure, particularly those from the upper-middle class, those attending academically strong high schools (mostly private and East Coast), and those with parents who are keen on reaching or maintaining educational status. But this group is far from the majority. Most students who go on to higher education in the United States are not preoccupied with entrance exams. They can find a place in a junior college or college simply by completing high school. Only for our best colleges and universities is there significant competition, and the manner of the competition greatly reduces the likelihood of success through cramming Japanese-style. A personal love of reading or a natural ability in science and math or an artistic talent or leadership are all important individual factors in our admissions approach. For the Japanese, the matter of gaining acceptance to a good university is like running a marathon or conducting a prolonged military campaign. Planning and stamina over a twelve- to fourteen-year period are required. And most parents realize this.

The popular preoccupation with entrance exams also shapes Japanese definitions of education. Despite the continuing public policy goals of developing democratic education, this intention at the high school level is largely overwhelmed by the more powerful pull of exam-oriented concerns. The criterion of efficiency in preparation, of meeting competition by gearing education to the examinations, reaches deep into nearly every corner of high school education. Nada, a powerhouse in this regard, is clearly a popular model; without a doubt, half of Kobe's parents would gladly pay the school's tuition fee if their children could get in. Citizenship, individualism, equal opportunity, creativity, social morality, strength of character, and other goals bequeathed by the Confucian heritage and Western example are not denied, but their significance fades considerably in the face of the more urgent demands for efficient preparation.

A division arises here between public values and private interests, between idealism and reality. The public, idealistic goals remain central to the rhetoric of politicians, officials, teachers, parents, and students. And they are all sincere in their desire that education further the development of democracy and promote individual growth. Yet, when the chips are down, most parents want success for their own children more than anything else. A gap thus develops between

parents and educators, one that has great significance to the question of reform. The growth of supplementary education and the rise to prominence of private schools like Nada has been noted. When the public side reforms, the private side grows and prospers. Because so many anxious parents are willing to pay additional costs of keeping their children in the race through private education, public sector efforts to reduce the grip of examinations are regularly stymied and even become counterproductive because they encourage parents to shift more and more reliance to private means. Prosperity increases this tendency, which can be clearly observed in the recent history of Japanese secondary education.

Are we not witnessing in all of this something highly indicative of Japanese national character? Many important virtues—diligence, sacrifice, mastery of detailed information, endurance over the many preparatory years, willingness to postpone gratification, and competitive spirit—are tied together at a formative period and are motivated largely by a rather selfish individual desire to get ahead (or as many put it, "to not fall behind"). Whether the desire is the parents' or the child's is never that clear, and this too seems characteristically Japanese. This desire is hardly individualistic in the sense of stemming from individual choice or the uniqueness of personality. Rather, it comes as part of a great mad rush, the product of group psychology, and it focuses on the goal of social status rather than on some more personal ambition. The entire process tests the ambitious student sorely, but the lesson learned in the cathartic experience is to knuckle down, to restrain one's instincts for pleasure and personal preference. Walking the prescribed straight and narrow path, wherever it leads, is the way of the successful student.

Conduct is one thing, but private thoughts are quite another. Exams measure conduct, but intelligent students are not robots. The private world of Japanese students is one full of imaginings and often bizarre images. One needs only to glance through the comic books that are so popular among teenagers to realize that they have a fondness for the extraordinary, the weird, and the obscene that stands in stark contrast to their outward conduct. Boys avidly consume illustrated stories about lethargic and often grotesque misfits prone to crude speech, slovenly living, flatulence, sexual misdeeds, and nihilistic senses of humor. They also take to comics that depict heroic boys, full of energy, fighting evil characters who threaten beautiful

girls or old people or the nation. In none of these cases do the stories approach realism. A final characteristic, then, of Japanese psychology that I see tied to the exam syndrome is a rich and distorted inner life seemingly encouraged by the strict and demanding exterior world. The American response would be to encourage the expression of this inner life and thus to close the gap, but that would spell disaster for the Japanese student. Students learn to keep conduct and private thought a safe distance apart. Individual uniqueness and feeling are not for immediate public consumption.