# Literacy West and East : Europe and Japan in the Nineteenth Century

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## 1. INTRODUCTION

The problems of illiteracy, on massive scales in the third world and within specific sectors in the industrialized West, have received a great deal of attention from both scholars and public officials. In an effort to turn the tide on illiteracy, governments, foundations, educational societies, and international organizations (most notably UNESCO) have mounted literacy campaigns and debated alternative strategies for teaching reading and writing. Yet these and other efforts aimed at promoting literacy have proceeded without appropriate attention to the social and historical contexts of the problem. Policy formulations have been plagued by simplistic assumptions linking more schools with higher literacy leading to economic expansion and social progress. The results have been disappointing.

In recent years a serious attempt has been made by Western historians to understand the complex social determinants of literacy and its effects in Europe and North America during the early modern period. Curiously, despite the fact that Japan is the only non-Western nation to have achieved sustained economic growth by the end of the nineteenth century, and despite the insistence by economists that the level of literacy and numeracy skills possessed by the general population is a key element in economic expansion, literacy in Japanese history has not yet engaged the interests of scholars. This paper is a tentative first step towards redressing this over-

sight. It begins with a review of major methods and findings drawn from studies of Western societies in order to suggest hypotheses and points of departure for the Japanese case. It ends with some suggestions about the nature of Japanese literacy and comparisons with Western experience, using selected data recently gathered for this purpose.

## 2. CHANGING CONCEPTIONS OF LITERACY

Conventional understanding of the meaning of literacy begins with the ability to read and write, but this view often masks a multitude of problems. For example, reading and writing are not unified skills. If one can write something, one can usually read it, but the converse is not always true. Nor are these two skills necessarily learned simultaneously. Although this was the case in most pre-modern Japanese *terakoya*, in most of Europe they were taught in sequence—reading first, then writing—creating differentials in skill levels. In Sweden, reading of the Bible had been mastered by broad masses of the population at home while writing was almost totally neglected until public schools took over in the nineteenth century. In Japanese there is the further problem of multiple character types (*kana*, *kanji*), making the determination of standards for reading and writing still more complex.

During World War II, the need to develop a notion of a socially relevant literacy that could identify persons incapable of understanding written instructions related to basic military functions led to the concepts of "functional literacy" and "functional illiteracy." In 1947, the US Bureau of the Census used the term "functional illiterate" to refer to those who had failed to complete five years of elementary school. This presumed an equivalence between school levels and literacy [LEVINE 1986: 26]. Following World War II, UNESCO became the world institutional center for literacy activity. The optimism and internationalism that prevailed after the war fueled confidence in literacy as a universally effective agent of progress and tended to delay the systematic and critical examination of such assumptions. Until the mid-1960s an orthodoxy survived in official and diplomatic spheres that treated illiteracy akin to epidemics like smallpox, susceptible to complete eradication by widespread administration of formal education. The preferred method of treatment was to increase primary school enrollment. The 1957 UNESCO survey *World Illiteracy at Mid-Century* states:

> If all children of school age in any country attended school for a sufficient length of time, there would eventually be no adult illiteracy in the population, except for those mentally deficient and incapable of learning to read and write. It follows, therefore, that the best means of preventing illiteracy is to provide adequate education for all children [UNESCO 1957: 165].

By 1976, UNESCO had moved a long way from the confident view that more

schools would increase literacy, which in turn would propel economic and social development. UNESCO now held that increased literacy was contingent upon the prior development of just those institutions and support systems that were earlier regarded as the ultimate consequences of literacy:

> For literacy to be effective and lasting it must be sustained by an infrastructure that not only provides literates with abundant reading matter but also maintains their taste for learning and broadening their horizons: information media, stable and mobile libraries, means of producing and disseminating the written word, museums, culture clubs, not to mention the schooling of children [UNESCO 1976: 192].

This turn to a more relative view of literacy, defined according to cultural contexts, with schooling almost an afterthought, resulted not only from the failure of large-scale efforts to eradicate illiteracy through schooling alone, but also from new insights gained from scholarly studies of the role of literacy in history.

## 3. LITERACY IN HISTORY: THE WESTERN EXPERIENCE

### 3.1 Historiography

In the 1960s, Western historians began turning their attention to the quantitative methods and conceptual models of the social sciences, a trend referred to as the "new social history." One outcome of this trend has been that historians have directed their attention to new areas of research such as mobility, work, the family, urbanization, and the mass media. Of particular significance have been new questions asked about the roles of non-elites in history. The study of popular literacy has now become one of the most dynamic areas in the social history of Europe and North America.

Challenging simplistic notions of literacy that have uncritically linked higher rates of literacy with progress, greater rationality, modernity, and a host of other benign abstractions, scholars such as François Furet and Jacques Ozouf in France; David Cressy, Lawrence Stone, and Roger Schofield in England; Kenneth Lockridge for the United States; and Egil Johansson in Sweden have begun to probe deeper into the complex social determinants of literacy. They have eschewed simple quantitative estimates of literacy, attempting instead analyses of the quality and meaning of being literate; they have shifted the focus from the question of how much literacy to the more revealing questions of who had what kind of literacy, when, and for what reasons. Thus, the setting in which literacy was transmitted, its institutional configuration, as well as the motives for its dissemination and acceptance are becoming appreciated.

Since the social history of literacy has evolved in conjunction with other branches of social history, it is most developed in those countries where the sources, methods, and training necessary for research in social history are most advanced. Thus, we know more about literacy in France and England than anywhere else.

Much of the pioneering work in the study of literacy has been done under the influence of the French *Annales* school or the Cambridge Group for the History of Population and Social Structures. German historians have done notable work in the social character of educational ideologies. Scandinavian historians have done outstanding work on the history of reading. The evolution of education and literacy in Italy and Spain are largely unexplored, reflecting the lack of development of social history in their national traditions.

While not challenging the value of literacy either for individuals or for societies, recent writings have made a critical perspective possible; they have added important qualifications to the view of literacy as the triumph of light over darkness. The new social historians of literacy have not only suggested new models for changing patterns of literacy over time, but have also refined the techniques for the analysis of historical evidence concerning literacy.

### 3.2 The Database

The first step, of course, in the discovery of new sources and the development of techniques for their analysis is the definition of the research problem. Historians had first to care about popular literacy and to see in its evolution a phenomenon of historical significance before data could be unearthed to describe it.

The most common sources for quantitative studies of Western literacy are the systematic records and registers to which men and women affixed their signatures. Marriage registers are considered the best of these, being the most comprehensive, but contracts, wills, receipts, and census data have also been used. Some historians remain skeptical about the significance of the ability to sign, but those most familiar with patterns of learning in early modern Europe tend to accept the presumption that signing ability was indicative of higher abilities. There are several reasons for this.

For one thing, in most of Europe, particularly in England, writing was taught only after reading had been mastered to some degree, usually after two or three years of training. Furthermore, personal names were typically not used in the early stages of writing practice because spellings were frequently irregular. This suggests that signing one's name was not an elementary skill. In addition, Furet and Ozouf, in their pioneering work on France, have established strong correlations between the ability to sign and the ability to read and write. Literacy levels established by signatures on marriage registers in 1866 and reports of ability to read and write in the census for the same year showed a 90 percent correlation [FURET & OZOUF 1982: 16–17].

Data indicating the ability to sign are not without problems. They clearly are imprecise indicators of an individual's level of skill; and the inability to sign cannot be equated with illiteracy. Because of the sequence of learning in early modern Europe, some could read who could not sign; moreover, in many schools, particularly those for girls, only reading was taught, suggesting that many brides who could not sign may have been able to read. Finally, there is the Swedish case, where

due to intense efforts by both the Protestant church and the state, reading ability was required for marriage certificates but writing was largely neglected. Thus, although signature data indicates that only about 20 percent sign literacy in the mid-eighteenth century, other sources suggest that virtually the entire adult population could read [CRESSY 1980: 178].

Despite such difficulties, signature data has taken on great significance for social historians of early modern Europe. R. S. Schofield argues that it is the one test of literacy that satisfies the requirements of being universal, standardized, and direct. Where it is available for a wide range of people over long periods of time, it can be used to track historical patterns and for making regional and sectoral comparisons [SCHOFIELD 1975: 318–319].

### 3.3 Empirical Findings

What conclusions may we derive from empirical studies based on evidence of this kind? The literature on England and France is now quite rich and the findings very suggestive. I have chosen from the most important studies three perspectives that seem to me particularly instructive for the study of Japanese literacy.

#### 3.3.1 National and Subsector Variations

One of the most significant contributions of recent studies of literacy in early modern Europe is the empirical confirmation, from analyses of signature data, of enormous discrepancies with regard to literate skills according to region, residence, gender, social class, and occupation. National differences are conspicuous both in terms of skill levels and the pace of change over time. In those areas most influenced by the Protestant Reformation, the signature data reveal the highest rates. In those English parishes studied, 60 percent of grooms and 35 percent of brides were able to sign marriage registers by the end of the eighteenth century, when these records first began to be kept. This was a substantial rise from a century and a half earlier when only 38 percent of men and 17 percent of women were able to sign the Protestant Oath of 1642. By 1850, the signature figures were 70 percent for males and 60 percent for females; by 1900, only 3 percent of males and females could not sign their names [CRESSY 1980: 177].

In both New England and Scotland, the influence of the Protestant church is cited as the primary reason for impressive showings in the signature data. For New England, studies show 84 percent of males and 46 percent of females able to sign marriage registers by the middle of the eighteenth century. In Scotland, by 1870, 90 percent of males were signing. Sweden is a special case in that the church requirements led to 50 percent of the adult population reading as early as the mid-seventeenth century, but only 20 percent writing by the end of the eighteenth. In Holland, 85 percent of males and 65 percent of females had signature literacy by the end of the eighteenth century, with urban areas particularly high, reflecting business activity there. At the same time, Belgium had 60 percent male and 37 percent female signature literacy. In Germany and much of southern Europe, brides and

grooms were not required to sign marriage registers, so comparable figures do not exist. Scattered data suggest a great deal of variation by region and gender.[1)]

The best early signature data is available for France. This is due to a systematic survey of parish registers carried out at the end of the nineteenth century by Louis Maggiolo. These records show that, at the end of the seventeenth century, 70 percent of males and 90 percent of females were unable to sign. By the time of the French Revolution (1786–1790), however, just under 50 percent of French grooms and just over 25 percent of brides could sign their names—10 percent less than in England [MAYNES 1985: 15].

In Italy and the Iberian peninsula, signature data is not systematic, but indirect indicators suggest that levels of popular literacy were among the lowest in Europe. Illiteracy levels have been estimated as high as 85 or 90 percent in Castile at the end of the eighteenth century. In Italy, marriage contracts (available only in some areas) suggest levels equally low, but rising. Northern regions were more literate than southern; and the artisans and traders of Florence and Venice showed remarkably high levels of literate skills [MAYNES 1985: 15].

Clearly, there were enormous national variations within Western Europe, and to generalize about literacy there or in the West is misleading. Beyond national figures, the work of the work the French and British groups already mentioned has made it possible to observe in some detail significant subsector variations within national communities.

Urban areas, almost without exception, were more literate than rural hinterlands. In areas of low literacy, the urban/rural contrast was most striking. In cities, most women could sign; in the provinces most could not. Within single communities, the differences in ability to sign were notable almost everywhere. Literacy patterns were seen to correlate positively with both occupation and class. Land-owning farmers were 75 percent literate, while only a few rural tenants could sign. Rural artisans and crop-growers were ahead of day laborers and shepherds. In towns, the propertied classes were virtually all literate, as were craftsmen and shopkeepers by the end of the eighteenth century. Urban laborers were generally illiterate. Universally, women had lower levels of literacy than men, but the differences narrowed where literacy rates were highest.

Within both rural and urban areas, communities differed widely. Some villages, like Vitry-les-Reims in France, had rates as high as 83 percent; others, like Germaine, had only 7 percent [FURET & OZOUF 1982: 38]. Regional variations in the frequency of share-cropping, systems of landownership, and seasonal migration patterns—migrant peasants being more literate than sedentary ones—help explain these differences [FURET & OZOUF 1982: 164–165].

Literacy variations among urban areas seem to be determined by two factors. One is the general cultural level of regions in which cities are located. Urban literacy was low, for example, in new industrial centers located in backward areas of

1) A convenient summary of literacy data from Western Europe, from which these figures are taken, can be found in Maynes [1985: 13–18].

France. The other determining factor is the kinds of functions that characterize the town. Towns with administrative, ecclesiastical, judicial, or university functions had higher levels of literacy than those centered around trade, port activities, or industry. Urban areas that were affected by massive migration from backward areas also tended to show lower levels of literacy. Furet and Ozouf have emphasized that it was not the mere congregation of people that affected literacy rates in cities and towns but the kinds of functions performed there, and these differed from place to place.

For the social historian, the subsector data on literacy are more important than the national averages, for they help reveal patterns of stratification among populations and how they changed over time. The European data on literacy have now stimulated intensive research into the environments that produced variations in human abilities.

### 3.3.2 Literacy and Economic Development

A second important revision based on empirical studies concerns the relationship between levels of popular skills and modern development. It has long been an article of faith among economists that a certain level of popular education is a necessary prerequisite for the inception of sustained economic development. Literacy data now provide some empirical evidence to call into question this facile assumption.

Early studies of literacy, in general, supported the claims of the "human capital" approach of economists. Carlo Cipolla, in a standard text described correlations between high literacy and economic development in geographical terms. But the precise nature of the connections were either couched in vague language or entirely overlooked [Cipolla 1969]. Recent empirical work casts considerable doubt on such simple, direct linkages. The data on literacy in Western Europe suggest, in fact, that the early process of industrialization and the urban growth that accompanied it intially had a *negative* impact on levels of popular literacy, because new industries did not require workers to be literate.

Michael Sanderson, looking at the textile industry in Lancashire at the turn of the nineteenth century, has shown that initial industrial development led to a dip in literacy rates due to the early entrance of children into the labor force. The result was that schooling opportunities for working class children diminished [Sanderson 1972]. Roger Schofield has pointed out, in this connection, that it was in the commercial areas, rather than industrial ones, that literacy may have had some impact. He points to the static nature of male literacy in England from 1750 to 1850 and continued low levels of female literacy during the period of early industrial growth to argue that there was little direct relation between literacy and economic development [Schofield 1973: 458].

Furet and Ozouf make a similar argument for France. During the eighteenth and nineteenth centuries, particularly where textiles were introduced, literacy rates stagnated or even declined. In France, the dampening effects of industry on liter-

acy were only reversed toward the end of the nineteenth century when literacy became almost universal.

The thrust of this argument is that in the short run, at least, the growth of factory industries often occurred despite declining literacy and that the decline itself may have been due to such development. Indeed, the really large and dramatic rise in literacy that occurred in some parts of Europe during the early industrial era affected the nonindustrial (that is, commercial and agricultural) populations more than the industrial sectors; this rise in literacy began before industrial influences were felt. In rural areas, it was commercial development, not industrial, that seems to have stimulated peasant interest in literacy.

### 3.3.3 The Impact of Schooling

The rough simultaneity between the rise of school enrollments and literacy has led to the assumption of a straightforward causal connection between the two. But empirical investigations of literacy have failed to substantiate a direct causal link.

In Western Europe it was not until the end of the nineteenth century that the public school system succeeded in capturing the clientele for which it was created. By the 1890s in England, Wales, France, and Prussia, 80 percent of the age group of five-to-fourteen year-olds and 90 percent of all boys were enrolled in primary schools, but all the evidence indicates that schooling at the turn the century was different from what it had been earlier. Far from the *ad hoc*, sporadic, casual and highly individualized experience it had been for most of the nineteenth century, schooling was more ritualized, formalized, regular, and longer in duration.

In England, most records of the early to middle nineteenth century show average school stays no longer than two years—and this was spread over three to five years because of seasonal attendance and frequent interruptions. In 1870, the average length of stay at inspected schools was still only two and a half years; by the end of the century, it had risen to seven years. Average daily attendance of enrolled pupils also rose. In Manchester, for example, daily attendance rose from 68 percent in 1870 to 82 percent in 1900. In Mannheim, Germany, strict enforcement of compulsory school laws forced the average unexcused absences per child per year to drop to 0.35 for boys and 0.18 for girls by the late 1890s [MAYNES 1985: 134].

By the early twentieth century, large numbers of people were being brought into national systems of education. Available data show diffusion of skills in literacy and arithmetic to much larger numbers of people, beyond the narrow range of elites who had dominated these skills for so long. Before 1900, however, the data suggests, in many cases, that school experience had little impact on many individual lives. What happened in school could be very peripheral to practical affairs and faded almost immediately upon leaving school. Much evidence from all over Europe during the nineteenth century suggests that children often left school with relatively few skills, or forgot what they had learned shortly thereafter. Schooling undoubtedly contributed to the rise in literacy skills, but was not the only salient factor.

Furthermore, regional patterns and social differentials with regard to literacy were established before compulsory schooling took hold. The expansion of schooling helped to bring literacy to populations that had been marginal to the system of voluntary or local provision of education. Schools thus speeded up the process of extending literacy to the masses, but they did not (at least at first) overcome the enormous social variations in literate skills that the empirical data dramatically reveal. Sweden, it should be recalled, achieved mass literacy *without* schools.

For women, the expansion of schooling was far more important in achieving literacy than it was for men. Schooling provided women with a means to overcome systematic cultural deprivation all over Europe, even if it did not lead to better opportunities in life. The effects of schooling should therefore be seen in terms of social conditions and circumstances established much earlier than the public school system, circumstances which the empirical data on literacy help to describe.

The period from roughly 1500 to 1900 in Western Europe witnessed a transition from "restricted" to "mass" literacy. Skills that had been the preserve of a small clerical and specialized elite were extended beyond this narrow core group and became widely available. But the process was neither consistent nor universal: patterns of literacy generally followed gradations in the social structure. The mapping of these differentials among various sectors of the population over time has been one of the most important contributions of the new social history of literacy in the West. In amassing new data and in raising challenges to traditional assumptions about the value and functions of literacy in Europe, these studies afford a stimulating comparative perspective for the study of literacy in other societies as well.

## 4. LITERACY EAST: JAPAN IN THE NINETEENTH CENTURY[2)]

### 4.1 Historiography

Nowhere has the presumed equivalence of schooling and literacy been held to more tenaciously than in Japan. Historians of education in Japan, unlike their counterparts in the West after the mid 1960s, have continued to focus their attention almost exclusively on school history. Taking public education and its role in economic development as their theme, they have searched the pre-industrial (Edo period) past for the roots of the modern system. The emphasis continues to be put on the origins of institutions and the impact of ideas, or on the political and administrative processes by which ideas were implemented in official policy. Reliance is placed either on administrative documents that recount the activities of state agencies or on the writings of educational moralists. The question of actual skill levels of the populace has remained outside the scope of interest (*mondai ishiki*) of the great majority of educational historians in Japan.

2) The author wishes to acknowledge financial support from Fulbright-Hays and the Social Science Research Council that made possible the original research in Japan during academic year 1988 underlying this section.

### 4.2 The Database

Japanese historical records, unlike those in England and France, do not provide a universal, standard, and direct measure of literacy across different sectors of the population for the nineteenth century or before. In the Edo period, administrative and family records were maintained in villages over long periods of time. But whereas such documents might have called for signatures in the European case, they did not in Japan. The Japanese attached relatively little significance to signatures as marks of personal identification. Personal and family data, such as marriage and death registers, or administrative records such as tax data or *shūmon aratamechō*, were kept by designated village scribes—often priests or village officials. Rarely did individuals put their own hand to such documents. When they did, as with commercial transactions, it was more common to affix a seal, called *insho* or *hanko*. In other cases, such as peasant protest petitions, farmers of the late Muromachi and early Edo periods had their names affixed in the form of a circle so the responsible party (presumably the first name on the list) could not be detected. The warrior class, of course, not only signed documents but developed elaborate *kaō* (artistically designed personal monograms) by which their certification of records could be instantly recognized.

Even if Japanese signature data were available for the masses of people during early modern period in anything like the quantities available, say, in France, it would not be of much use in measuring literacy, for a number of reasons. For one thing, the ability to write the anywhere from two to six characters that might make up a personal name would not presume higher skills in a writing system that required knowledge of *hiragana*, *katakana*, and *kanji* (Chinese characters) for full literacy. For another, the sequence of rudimentary learning at *terakoya* (parish schools) during Edo period Japan was such that the ability to write one's name did not presuppose the ability to read. At the *terakoya*, unlike European schools, learning typically began with reading and writing simultaneously or with writing first, with characters copied out of copybooks prepared by the teacher.

Despite the absence of appropriate signature data for Japan and despite the view of many scholars such as Katō Hidetoshi, who wrote in 1958 that "there are no materials on the extent of illiteracy in the Meiji period" [KATŌ 1958: 317], there are, in fact, direct measures of popular literate skills. I have selected two types from among the several I am currently collecting and analyzing to describe here. Data from conscription exams and from village literacy surveys can be used to probe regional and subsector variations with respect to literacy skills, to provide an empirical basis with which to make comparisons with the European experience, and to suggest hypotheses and guidelines for future research.

### 4.3 Conscription Data

In the statistical annual of the army ministry (*Rikugunsho Tōkei Nenpō*), there are records of the intellectual levels of new recruits beginning in 1891 and for each

year thereafter. Starting in 1899, more detailed records, including breakdowns by birthplace and family occupation, are available for the entire age cohort of twenty-year-old males eligible for military service. In addition to these national data, detailed local statistics on educational achievement are available for Ōsaka and Kyōto in published form [MONBUSHŌ SHAKAIKYŌIKU-KYOKU 1974]. Scattered illiteracy data is also recorded in the *Monbushō Nenpō* of the mid-1880s for Mie, Okayama, Shiga and Kagoshima Prefectures.

The army test materials, though limited to male twenty-year-olds, nevertheless show rather astonishing levels of total illiteracy continuing well into the twentieth century. Results on the test were recorded in terms of equivalents to levels of the compulsory school system. The criterion for elementary school reading equivalence was either successful reading of an elementary school textbook or reading a simple sentence or short poem in *kana* and a few simple Chinese characters (such as the ones for *sora* 'heaven', *tsuchi* 'earth', or *mizu* 'water'). For writing at the elementary level, the test was to write one's own name, address, and height. Below elementary-school equivalence, there was a category called "a little learning." This presumably indicated some rudimentary skills but less than the elementary school standard. Still lower was a category of "absolutely no ability to read, write, or do arithmetic," which indicated total illiteracy, without even knowledge of *kana*.

In 1899, about 25 percent of Japan's twenty-year-old males fell into this last category. If one includes the "little learning" group, the percentage of illiterate males in this age group goes over 50 percent. This is not so startling if one realizes that these twenty-year-olds would have been of school-going age ten to fourteen years earlier, and that 25 percent would roughly match the school attendance figures for the years 1885–1889. Bearing this in mind, it is reasonable to estimate that rudimentary mass literacy took hold in Japan at least ten to fourteen years after 1905, when school attendance reached nearly universal levels, *i.e.* about 1915–1919.

The conscription exams also allow us to look at patterns of illiteracy by region. While there are vast differences in illiteracy scores by geographical area, no easy conclusions can be drawn. Rural-urban differences, which are pronounced with respect to provision of schooling in the Edo and early Meiji periods, are not maintained consistently with respect to actual skills by late Meiji. Clearly, in certain rural areas the levels of illiteracy were high. In 1899, over 50 percent of the young men in areas such as Ōmura, Kagoshima, Miyazaki, Okinawa, Matsuyama, and Kōchi were totally illiterate. But in the cities and provincial towns, one finds both high and low rates. In some cities, like Nagano, Tsu, Sendai, and the Azabu section of Edo, the rates of illiteracy were very low, around 10 percent. Other cities, like Ōsaka, Kyōto, and Yokohama, show 25 percent illiteracy among twenty-year-olds. Assuming that these figures are generally accurate, this suggests that, as in Europe during the early stages of development, the amount of industrial activity in an area of Japan was an important variable with respect to literacy.

Active industrial development in the late nineteenth century may have functioned to impede literate attainment by drawing children into factories and away

from schools; or it may have simply discouraged the retention of skills learned in schools (for the school attendance rates of these cities were relatively high). Further work needs to be done to interpret these data; it is already clear, however, that they will afford a useful new perspective from which we can survey the social realities of the early industrialization process in Meiji Japan.

The conscription test figures confirm continuing occupational stratification in educational opportunities and achievement. In Ōsaka as late as 1911, over half of those in the emerging professional classes (bankers, government and company officials) and those engaged in commerce had graduated from higher elementary schools, but only 40 percent of farmers and artisans had done the same, and 80 to 90 percent of fishermen and laborers had less than an elementary education. This suggests that although the data on school attendance show virtually full compliance with compulsory education laws, their effects were not felt evenly.

The army tests also include a section relating family occupations of examinees with the quality of their learning. Designations of "superior," "average," and "inferior" with respect to test scores are arranged by occupation. In 1911, 15 percent of elementary school graduates scored in the lowest category; in 1900, an official report had indicated that, for 16.7 percent of pupils, four years of compulsory schooling had no effect—virtually the same percentage over ten years [YAMAMOTO 1969]. Conversely, a significant percentage of those who did not attend school at all scored in the "superior" category of educational achievement. Among examinees from families in the commercial sector, 50 percent of non-school attenders were placed among the superior achievers. These data confirm doubts about the wisdom of equating school attendance with literacy. Obviously, influences other than schools were operating, particularly in the commercial sectors of cities.

Although the conscription data are available only for years later than we might wish, they suggest patterns set in place much earlier. They provide empirical verification for the persistence of hard-core illiteracy well into the twentieth century and for vast differentials in skill attainment by region, class, and occupation that belie the general upward curve of school attendance. The figures on illiteracy in cities suggest that urbanization in the late nineteenth century followed various patterns with correspondingly different requirements for literate skills among citizens.

### 4.4 Village Literacy Surveys

The great advantage of conscription data is that they allow breakdowns by region and occupation. But like signature data the army tests fail to specify actual skill levels with adequate precision. The best possible source for literacy analysis would be contemporary surveys that tested specifically for literacy skill levels. Contrary to what is usually believed, such ideal sources do exist. So far, a survey has been found for only one small village, but from it we can generate some working hypotheses about the structure of literacy in rural villages in both late Edo and Meiji Japan.

In 1881, a literacy test was given to all 882 males in the small village of Tokiwa

in Kita Azumi county in what is now Nagano Prefecture. The circumstances under which it was given are not known, but it appears to have been administered by county (*gun*) authorities, although no other tests like it have yet been discovered in the area [KOBAYASHI 1973].[3] The test results are very suggestive because, unlike signature data and conscription exams, they provide greater detail than merely the number of illiterates. The recorded results rank examinees by specific level of skill in a six-stage hierarchy from inability to read or write one's name, address, or numbers (Level 1) to the ability to read official proclamations and newspaper editorials with full comprehension (Level 6).

The ages of examinees are also recorded. If we assume that examinees achieved their lifetime level of literacy during school-going age (*i.e.* from six to thirteen), we can make calculations that enable us to chart changes in levels of literacy attained over time, from the 1810s (when the oldest examinees were of school-going age) to the 1870s (when the youngest were of school entry age)—almost the entire span of the nineteenth century.

What do the data tell us? Most basically, the language of the categories suggests that the standard for measuring literacy in this remote farm village was related to business and entrepreneurship. Level 3 in the hierarchy is "able to keep daily accounts of revenue and expenses." Level 4 includes being "able to fill out simple financial forms." Level 5 reads, "Able to handle ordinary business transactions." The language is clearly commercial, indicating that, by the 1880s, this farm village was in close touch with urban centers of commerce. What it doesn't include is anything suggesting religious or moral imperatives, which were prime forces behind the expansion of literacy in many parts of Europe and America.

There was a very broad range of skills among the male population of Tokiwa Village in 1881, from total illiteracy to fluency with government documents and the mass media. But overwhelmingly the largest numbers are at the bottom of the scale (312 totally illiterate and another 363 able to write only their name and address out of a total of 882). At the more functional levels—ability to read ordinary materials, fill out financial forms, handle business transactions, read government edicts and newspapers—the numbers drop off precipitously (39 at Level 4, 18 at Level 5, 15 at Level 6).

Looking at percentages by level during the decades in which literacy is presumed to have been gained, several trends are clear over the span of the nineteenth century. The percentage of those totally illiterate dropped steadily throughout the late Edo and Meiji periods; at the same time, the percentages of those minimally literate rose. At these rudimentary levels the changes can be accounted for by increasing attendance at *terakoya*, for it was at these levels that such schools aimed. It is also clear that no sudden jumps took place with the installation of compulsory schooling; the growth was steady and incremental over a long period of time going

3) The author wishes to thank Mr. Hideo Satō of the Kokuritsu Kyōiku Kenkyūjo in Tōkyō for calling his attention to this material, and to Mr. Kobayashi Yoshitsugu, who helped the author interpret some of the Tokiwa Village data.

back at least as far as the first decade of the nineteenth century.

At more functional levels of literacy, the percentages are low and no clear trends emerge over time. The data seem to confirm the continuity of a small but highly trained elite leadership who performed literacy tasks in the village. The monopoly on high literacy of this group—probably officials, teachers, doctors, priests—did not spread much beyond its limited membership over time. Such skills were likely achieved outside of any institutional setting by direct experience in hereditary positions or apprenticeships, or through special tutoring.

Analysis of those who scored at the higher levels on the survey reveals that the vast majority were from families who performed administrative tasks in the village. In this village, as in others in the Nagano area, administrative tasks were widely shared among a number of families and were not concentrated in one village headman. One can suggest for the purposes of future research the hypothesis that whereas literacy at the rudimentary levels might have been a function of the diffusion of *terakoya*, at more functional levels it reflects village structure. In villages like Tokiwa, where administrative tasks were shared, one would expect to find more villagers with higher skills than in areas such as Tōhoku, where the administration of villages tended to be dominated by a single family.

Although a very small sample like the Tokiwa survey cannot be used to reconstruct national or even regional trends, it does provide empirical evidence for the assertion that literacy rates depend upon what particular levels of literacy are meant. If one included as literate all those with the most minimal skills, a claim of 65 percent male literacy in the 1850s and 76 percent literacy by the 1870s would be justified. If, on the other hand, literacy is defined in reasonably functional terms as the ability to read at least ordinary materials and fill out simple forms, the percentages in this remote village dip down to 7 percent males literate in the 1850s and 8 percent in the 1870s. If one assumes that the kind of literacy required for economic growth would be of the reasonably functional kind, this sample would suggest that the linkage between school attendance in the late Edo and early Meiji periods and economic expansion in the late nineteenth century would be tenuous at best.

## 5. CONCLUSION

Initial investigations have suggested remarkable similarities between the European and Japanese experiences with respect to literacy patterns in the nineteenth century. Although traditional preferences among scholars for enrollment data in both East and West have obscured some social realities, direct measures are available for Japan that enable us to describe the complex social and cultural environment that supported the growth of learning among various sectors of the population. Limited as the data may be at this point, they point, in the Japanese case as well as the European, to vast differences in skill levels throughout the nineteenth century across regions, among occupational groups and classes, and between the sexes. They specifically confirm both the persistence of total illiteracy among some groups well

into the twentieth century and extremely high levels of skill among the rural leadership extending back at least to the beginning of the nineteenth century. They suggest too that the simple linkage between higher mass literacy and economic development and the identification of schooling with increases in popular competencies mask more than they reveal about the dynamic social realities of literacy.

One area of critical difference in the European and Japanese cases is the role of religion in motivating literacy development in the early modern period. The pervasive influence of the Protestant Reformation is well documented in the European case as an important variable in accounting for the varieties of literacy achievement across regions and populations in Europe. In Japan, moral concerns were certainly behind official encouragement of commoner learning, but the difficult issue of motivations toward literate attainment in the Japanese case must been left for future study. Here too, it seems fair to say that recent scholarship on Western literacy may also provide an appropriate comparative framework and stimulate critical analysis of the social determinants and effect of literacy in nineteenth century Japan.

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