1

INTRODUCTION

Toyota is arguably the quintessential Japanese organization. It comes as close as any firm does to practicing "Japanese management" that includes features such as lifetime employment, company ideology, and group responsibility. Despite its size and power, it hangs on to the rural, family-owned image. Technically, this image is certainly true. The Toyoda family still directs and owns most of the corporation, and Toyota's Japanese manufacturing facilities are located in rural Aichi prefecture. However, in reality, Toyota is one of the world's corporate giants and bears little resemblance to the average rural family-owned business. It coordinates an extensive supplier system that acts to externalize many of the risks and costs of modern mass production, has staggering in-house financial resources, and utilizes aggressive marketing strategies. It has developed a production system that, according to Womack, Jones, and Roos (1990) of MIT and Kenney and Florida (1993), represents the first major innovation in the production of automobiles since Ford's assembly line innovations. Few Japanese organizations have been as successful as Toyota. In fact, few organizations in the world enjoy Toyota's prosperity and power.

Perhaps because of its success, Toyota has been unwilling to change the essentials of its production and management systems in its overseas operations. Like the other Japanese automobile companies who are all recent arrivals to the U.S. manufacturing scene, Toyota intends to transplant a modified version of its Japanese style of organizing to its U.S. plants. This is in sharp contrast to the Japanese trading companies, banks, and electronics manufacturers that have been in the United States since the 1960s and have used standard Western management practices in their U.S. facilities. Thus, the Japanese automobile companies' investment in the United States provides organizational

1

scholars with the unparalleled opportunity to study the creation of archetypical Japanese organizations in a "foreign environment" and the intersection of Japanese management with American employees. The Japanese automobile plants in the United States are actually large organizational laboratories conducting social and organizational experiments. No wonder the transplants have generated such a significant amount of public and scholarly interest.

I was fortunate to be at the University of Kentucky in Lexington when Toyota established its Camry plant—Toyota Motor Manufacturing (TMM), located about fifteen miles north of Lexington in Georgetown. I was able to study Toyota and TMM during this critical time. The purpose of this book is to present the results of that research: an analysis of how Toyota is re-creating its form of management and team culture in its Georgetown plant.

I began by reading the material currently available on the topic of Japanese management. In this way I was able to define what is meant by "Japanese management." Next, I needed to find out what the employees were experiencing at TMM and discover the official policies, structures, procedures, hierarchies, and so forth, in the organization. With this information I could determine the degree of overlap between the "ideal of Japanese management" and the situation at TMM. More importantly though, this exercise allowed me to show how abstract organizational features like group responsibility, culture, communications patterns, and the like, become concrete daily activities of employees via the organizational mechanisms of job descriptions, personnel policies, departmental structure, hiring and training procedures, and so forth.

To organize and make sense of the data I gathered in my research, I developed a theoretical framework using "team" as the dominant metaphor. I was very reluctant to use the concept of team, as it is a theme heard too often in Toyota commercials—I feared that my theory would sound more like an advertisement than a research treatise. Nonetheless, it was impossible to avoid. "Team" permeates every aspect of the organization and is a large part of the daily reality of TMM workers. Team as metaphor provides a means of articulating between the levels of reality at TMM—that is, between the worker, the work team, the local company, and corporate Toyota. It illustrates the interrelationships and interdependencies between these levels. Using the team theory we are able to see how, in fact, Japanese organizations penetrate the small work

group and recruit small group support for organizational goals. We realize what organizational mechanisms contribute to the creation of the "community-of-fate" culture among employees. We can predict areas of tension and potential problems. Furthermore, the theory can provide employees with the conceptual tools to better understand the organization in which they are embedded.

Bureaucracy: Traditional Western Management

Before examining the characteristics of Japanese management, let us first consider the standard model of management used in the West. In that way it will be clear just how Japanese management differs from common Western practice. The best and most often cited depiction of this model was presented by Max Weber in the 1920s in his elaboration of the characteristics of bureaucracy. Weber made it clear that he was describing an ideal type; that is, he was presenting the features of the perfect bureaucracy. He recognized that this model probably did not (and still does not) exist anywhere in reality. However, it is still important to understand it since, no matter how imperfectly, people and organizations continuously aspire to implement the model.

Most people view bureaucracy as the least ideal way to organize complex human activity. Everyone loves to hate bureaucracy. However, its negative image results from misconceptions. There are two reasons for the general disdain of bureaucracy. The first is that most people don't know the real meaning of bureaucracy and believe it is synonymous with government operations (which, according to common opinion are ipso facto bumbling and ineffective). Second, bureaucracy as an organizing format is so successful that almost all organizations use it and, therefore, we don't realize how bad things would be without it. Bureaucracies are ubiquitous in modern life and most admonitions for organizational improvement are really calls for more bureaucracy, not less.

One final point before examining Weber's model. Charles Perrow suggests that organizations are tools, and it is very helpful to use this metaphor in our examination of bureaucracy. Accordingly, bureaucracies are tools used by masters to accomplish some goal. The masters decide what the goal should be, but are not themselves part of the bureaucracy. The board of directors of a corporation, the executive board of the Girl Scouts or the United Way, the local school board, the

owner of a professional football team, and the legislature are all masters who determine policy. The bureaucracies they control are charged with the mission of carrying out these policies in an efficient manner.

Let us turn now to the basic characteristics of Weber's ideal type bureaucracy. Perhaps the central feature of bureaucracy, as Weber presented it, is its pyramidal structure. At the top of the pyramid is the chief administrator (sometimes called the general manager, hospital administrator, superintendent, secretary of defense, chief executive officer, etc.) who is appointed by the policy-setting body to accomplish their goals. At the bottom are the functionaries (teachers, assembly workers, doctors, soldiers, ministers, accountants, waitresses, etc.) who actually perform the work of the organization. In between are lower-level administrators, vice presidents, principals, shop-floor managers, sergeants, bishops, and so forth, who act as conduits passing orders from the chief administrator to the functionaries, and communication and information back up from the functionaries to the chief administrator. These intermediary positions use their expertise to translate general goals into the specific concrete actions needed to accomplish the goals. With each step down the pyramid the general goal becomes more specific, more refined. For example, what started out as a general policy goal of making 4 percent profit is divided into more specific departmental goals like more aggressive marketing, training employees, buying new machinery, or closing less profitable outlets. Ultimately, these goals are transformed into policies, rules, and procedures that are enacted in the day-to-day activities of the functionaries. Some positions in a bureaucracy are supportive or advisory and are not inside the pyramid. Researchers, legal advisors, and clerical positions are examples of what are called "staff positions," as opposed to the line positions contained within the pyramid. The most important distinction between line and staff positions is that, theoretically, people in line positions can be promoted up through the pyramidal hierarchy. People in staff positions usually cannot be.

Lines of authority and responsibility are clearly specified in a bureaucracy. There is a chain of command. Everyone in the pyramid knows they report to the position directly above them and the division of labor ensures that each identified task has one and only one person responsible for it. Therefore, credit and blame can be doled out accordingly. Those of us who have worked in a nonbureaucratic organization

like a mom and pop restaurant or grocery store know how difficult it is to do your job when all members of the owning family are in charge. It's not clear who you report to and, in fact, situations occur when two or three of the bosses give conflicting orders. Similarly, if servers in a restaurant do not know which tables to wait on, conflict and ambiguity can result, affecting the quality of service to customers.

In a bureaucracy people are hired for their expertise and promoted for meritorious performance. This requires that each organizational task be outlined in job descriptions that contain the exact responsibilities of the job and what quantifiable measure of expertise and ability apply. Prior work experience, paper and pencil tests, and academic credentials often serve as indicators of expertise. Since each position has clearly identified responsibilities, how an individual fulfills those responsibilities is a measure of merit and provides the basis for promotion decisions. This principle is intended to lessen the subjectivity that sometimes affects hiring and promotion decisions so that people with the ability and knowledge to accomplish the organization's mission (not cousins, friends, or people who helped the chief administrator get into office) will be hired for organizational jobs; and office holders will be rewarded with promotion, or salary increases, for exemplary performance in fulfilling the responsibilities of their job (not for how loyal they are to the chief administrator). The reasoning is that if people are hired for their skill in performing a job—teaching, for example—the mission of the organization (in this example, educating students) is more likely to be accomplished.

Another characteristic of bureaucracy is that administration is a full-time job and constitutes a special skill. That administration is a separate skill is affirmed by the creation of whole bodies of knowledge and corresponding academic disciplines—for example, management and public administration. The purpose of these programs is to prepare their graduates so that they can administer a broad range of organizations, irrespective of those organizations' specific goals.

In a bureaucracy the functionaries do not administer while performing their primary tasks. And although administrators may have worked their way up from the rank of functionary, they do not now routinely engage in that kind of work. However, the more emphasis an organization places on the science of administration (as opposed to the profession of the functionaries), the less promotion from the ranks is

likely to occur. In many for-profit organizations it is not necessary to start on the line, or in the ditches, or behind the counter to move up the management ranks. In fact, administrative skill is often viewed as completely distinct from the skills necessary to carry out the mission of the organization. Many believe that a good administrator in business can administer a government agency, even though that person has no experience performing the agency's work, or that serving as an officer in the military qualifies a person to be a manager in business, and so on.

There are, however, limitations to the transferability of management personnel and skills between organizations. In organizations where the mission of the organization is more important than, and may conflict with, efficient administration, the skills of the functionaries are viewed as more important than administrative skill. Hospitals, scientific research institutes, and schools are examples of organizations in which there could be conflicts between efficiency and the organization's mission. Thus, many people feel ambivalent about professional managers running hospitals (Could an army general effectively manage a hospital?), or noneducators directing school districts (Would the CEO of General Motors be able to effectively administer the Detroit school system?), and recognize the absurdity of professional administrators overseeing a religious order. In these circumstances, special training is given to selected functionaries creating linking professions. Hospital administration, educational administration, and public administration are college curriculums (and professions) intended to combine the skill and understanding of the functionaries with the knowledge of the science of administration.

People who work in a bureaucracy view their job as a vocation; that is, they are dedicated to the mission of the organization. Their loyalty is to the organization (and its goals), not to any particular chief administrator. To ensure that this occurs, office holders must have some kind of job security. They must be protected from capricious or malicious retribution from chief administrators. Job security allows office holders to challenge chief administrators for the sake of the organizational mission. It is intended to enable office holders to see themselves as servants of the organizational goals and not as personal servants of the chief administrator.

On the other hand, the chief administrator usually enjoys no such job security. The policy-making body (the master) reserves for itself the

right to summarily replace chief administrators, who are ultimately held responsible for the success or failure of organizational goal achievement. Congress and the president can remove the secretary of defense, but individual soldiers, even admirals and generals, are protected from political removal. The board of regents of a university can remove the president of the university, but not particular faculty members. This is not to say that these office holders cannot be removed. They can be, but the procedure is lengthy, requires proof of malfeasance of office (court martial, disbarment, censure, etc.), and often must be approved by the office holder's peers. This characteristic occurs less frequently in private, for-profit bureaucracies than in public ones. Even so, white-collar employees of large corporations enjoyed a kind of "permanent employment" until the last decade, and union representation prevented capricious or malicious dismissal of blue-collar employees.

Another principle of bureaucracy is that office holders are entitled to use the resources (including the power) of the organization only for organization business and only to achieve organizational goals. Prior to bureaucracy becoming commonplace, people often used church, government, and business organizational resources for their own personal ends, to achieve personal goals. In businesses there was no separation of monies spent for tools, material, and labor from those spent for personal and family reasons. Neither was there a well-defined limit to what organizations could ask of office holders. Office holders' families sometimes were held accountable for the office holder's mistakes and might have to fulfill the duties of the job should the office holder become sick or injured. Family and personal financial resources could be levied for organizational activities.

The difference is illustrated by considering a family-owned business that is not bureaucratized and not managed by hired professionals. Members of the family work in the business whenever there is a need. They use whatever they want from the company stores. There really is no separation between personal and organizational business. Under these circumstances, it is very difficult to tell how much profit the business earns, where it could be made more efficient, and where capital should be invested because uncounted hours of labor are contributed by family members and unknown amounts of business resources are used for personal ends.

Probably the principles that most people readily associate with bureaucracy are that (1) they are managed by strict adherence to written rules and standard operating procedures and (2) they make use of files in the performance of their tasks. Horror stories abound about how bureaucracies turn individual clients into numbered files, dehumanize them, and then misfile or lose the file. Similarly, the absurdity and inflexibility that can result from a preponderance of rules, and strict adherence to those rules, is legendary. However, consider for a moment the alternatives. Written records of transactions and files immensely improve the memory of organizations, allowing them to conduct business in a consistent manner beyond the life of any one office holder. This becomes an important factor when you need to prove to someone that you graduated from college, pay your bills, were married to a particular person, or that you were born on a certain date, to specific parents, and were given the name you've grown accustomed to using.

Before European governments were bureaucratized, capitalists were already using bureaucratic procedures and lobbying for governments to follow suit. The reason capitalists favored the bureaucratic form was that adherence to rules and recorded transactions would help to ensure that government activities would be predictable and evenhanded, and that these features would exist no matter who held the offices. At the same time, people began to believe that "everyone should be equal before the law." Therefore, they wanted government to treat all citizens, regardless of wealth or family (and today regardless of sex, race, ethnicity, or religion), the same. What better way to do that than to turn all clients into numbers and to enforce the rules without regard to personal situation?

Bureaucracy is an extremely popular method of organizing because, as Weber put it, "It is a power instrument of the first order." There is no other method of organizing complex human activities that is as efficient at implementing the master's orders—and as enduring and persistent—as a well-functioning bureaucracy. All the popular lore about the ineptitude of bureaucracy is usually about the imperfect articulation of bureaucracy in an organization. To illustrate the point that bureaucratic and bungling are not synonymous, let us consider one of the most effective bureaucracies around today, professional baseball teams. Satisfy yourself that professional baseball teams are indeed bureaucracies. They are organized pyramidal with functionaries (base-

ball players) on the bottom and full-time professional managers above, decreasing in number until the general manager. There is a strict division of labor, clearly specified responsibilities, decisions go from the top of the pyramid to the bottom, positions are filled on the basis of merit, and bonuses or raises are accorded to those who do the best job of fulfilling their job responsibilities. Professional baseball has elaborate rules and regulations and maintains extensive records on games and players down to the most minute details of batting and pitching performances.

Two ingredients of bureaucracies are missing from professional baseball, job security and a career ladder. Movement from player to staff or team management occurs for only a minority of players and is not always viewed as a promotion. Nor is it always accompanied by an increase in pay. Some might contend that job security is the critical feature of bureaucracy and that an organization without job security is not a bureaucracy. I note that position. However, the advantage of using professional sports as exemplars of bureaucracy is that their organizational goals are much more unambiguous and easy to measure than in most other types of organizations. Games are won or lost. Seasons are winning or losing. This advantage outweighs the fact that professional sports teams may be an imperfect match with the ideal type bureaucracy. Recall that no organization perfectly replicates all the characteristics of bureaucracy.

In case there are doubts about the superior ability of a bureaucratic baseball team to achieve the master's goal, which usually is to win baseball games, imagine a contest between the Cincinnati Reds and a nonbureaucratic baseball team, like the neighborhood crew who get together on some Sunday afternoons to play baseball. Who would win? Of course, you might think the Reds perform better not because of the way they are organized but because of the huge salaries given to players. How then to account for the fact that the local college or high school baseball team would almost certainly defeat the nonbureaucratic neighborhood team also? Unquestionably, part of the difference has to do with the talent of the players. An essential feature of bureaucracy is filling positions with people who are the most skilled in the requirements of the job. However, the success of a bureaucratic baseball team results from more than recruiting the best talent. If the most gifted athletes in the world are hired but they rotate positions haphazardly, are expected

to raise money and make travel arrangements, do not know or adhere to the rules, have no one to organize practices or strategies, are rewarded capriciously partially because no one is keeping track (recording and filing) of performance, and there is constant bickering since no one wants to catch and everyone wants to pitch and all want to bat lead off (there is no one to make decisions), how effective will they be at winning baseball games? The most convincing argument that successful baseball teams are bureaucracies is evident in the answer to the question, What would have to be done to whip the neighborhood team into shape to compete effectively against the Reds? The answer, bureaucratize.

Although I have done my best to counter the negative stereotype of bureaucracy that seems to prevail in the common wisdom of our culture, I would be remiss if I left the reader with the impression that bureaucracy is without weaknesses. It is not my purpose here to delineate all the advantages and disadvantages of bureaucracy. Sufficient to say that there are weaknesses, the more serious of which are not necessarily the ones that come readily to many people's minds. Effective bureaucracies must be constantly vigilant and even then sometimes the multiplication of rules leads to permanent paralysis. Worse still, bureaucracies tend to become so powerful that the master can no longer control them. Their relative immortality and expertise makes it difficult for masters to effect any fundamental internal changes. This can happen in for-profit bureaucracies, however market forces will usually provide an eventual correction. Public bureaucracies and private, nonprofit bureaucracies have no similar built-in destruct mechanism. The Chinese bureaucracy kept functioning as it always had in spite of the conquest of the empire by the Mongols. The Roman bureaucracy continued to collect taxes and distribute food and other supplies long after the central empire itself had collapsed. The bureaucracy of the Roman Catholic Church has continued to operate in pretty much the same way for almost two thousand years, surviving scandals, wars, plagues, and tumultuous disputes over church leadership and sacred doctrines.

Regardless of problems with bureaucracies, I contend that it is the prevailing standard method of organizing complex human activity in the West. With an understanding of the standard bureaucratic model, it will become clear in what way the Japanese style of management deviates.

Japanese Management

Japanese management refers to a particular kind of management characteristic of large Japanese organizations. As scholars of Japanese organizations like William Ouchi or Richard Pascale and Anthony Athos point out in their 1981 books, this style of management is not unique to Japanese firms. The practices ascribed to Japanese management are seen in a variety of non-Japanese organizations, but are more common and more normatively accepted in Japan. The number of organizations that implement almost all of the features of Japanese management is limited, even in Japan. Robert Cole (1979) and David Plath (1983), two researchers who have studied Japanese organizations in Japan, conclude that only about 30 percent of workers in Japan work for an organization that practices Japanese management. Thus, while variations of Japanese management are present in most Japanese organizations familiar to Americans and may be viewed by the Japanese as the model or ideal management style, in actuality the majority of Japanese workers do not experience Japanese management.

James Abegglen (1958), Michael Yoshino (1968), and Ronald Dore (1973) are the scholars whose work is usually recognized as providing the definition of Japanese management. They were studying Japanese organizations before it became a popular topic. My account of the ideal type Japanese organization is an aggregation of their descriptions. I will proceed by comparing Japanese management with the bureaucratic model—first by considering how the two differ, then I will show how they are similar, and finally, I will examine aspects of Japanese management that have no counterpart in the bureaucratic model.

Pyramidal Structure and Nenko
(The Seniority Pay and Promotion System)

Bureaucracies and Japanese organizations are both structured pyramidal, but the shape of the pyramid and how internal processes are associated with the pyramid differ in each. Japanese organizational pyramids are "tall, thin, and finely grained." Traditional bureaucratic pyramids are flatter and fatter at the bottom. The feature that is probably most directly responsible for the tall Japanese pyramid is the fact that promotion and pay are based on seniority and not merit. Recently many

Japanese firms have begun to consider merit as an element in their salary determination formula, and the significance of seniority in promotion and pay considerations declines at upper management levels where merit plays a larger role. Nonetheless, seniority remains important and has historically played a critical role in making Japanese organizations unique.

Since seniority is the central element in promotion, each group of employees hired at the same time is promoted at the same point in their career, and each year of seniority is rewarded with a slightly higher position and/or a larger salary than individuals hired in subsequent years. In order for the organization to accommodate higher status and pay for each level of seniority, it must have many positions to which people can be promoted. The levels do not have to differ from each other greatly to achieve the desired effect. The result is an organization with many levels in the hierarchy (finely grained) and relatively few people at each level, causing the organization chart to look taller and thinner than hierarchies in Western bureaucracies.

Consensus Decision Making

In bureaucratic pyramids, decisions are made at the top and are communicated to the lower levels where they are carried out. Feedback from workers and information about consumers, government regulation, competition, and so forth, moves from the bottom to the top where decisions can be made informed by this input from below. In contrast, in Japanese organizations, decisions are made by groups of people close to the issue under consideration. The process is supposed to work like this: anyone with an idea or concern can assemble the relevant people. These people meet, discuss the matter, get more information if necessary, deliberate, and all agree on whatever decision is reached. After the decision is arrived at, notice of the decision is circulated to other departments and climbs the hierarchical ladder to "inform" the higher levels. Higher management will usually rubber stamp approval unless the decision conflicts with decisions or matters in other parts of the organization of which the group is unaware. The decision then returns to the group for implementation.

Proponents of Japanese management concede that this process of decision making requires more time to reach decisions. However,

because implementation is smoother and faster than in Western bureau-cracies, they contend that on balance no more time is expended in the Japanese process. In addition, they say, the quality of decisions is better since the people who are most knowledgeable about the matter are making the decision and the process allows workers to have a sense of empowerment in regard to their work environment.

Division of Labor

Another area of difference is that in traditional bureaucracies there is a precise division of labor with specific responsibilities assigned to each position, and each position is identified by a detailed job description. Japanese organizations assign responsibilities, defined only in general terms, to groups. The individual member's role within the group is left unspecified. The group is rewarded or sanctioned as a whole for their success in accomplishing the group tasks. This requires that each group develop internal informal processes of motivating employee participation in group tasks to augment organizational mechanisms, and that individuals be responsive to group pressures.

Job Security

Japanese organizations share certain characteristics with the bureaucratic model that sets both apart from many Western for-profit organizations. Job security is one such characteristic. In analyses of Japanese management, this is called "lifetime employment" and is frequently cited as the key element of the management style. A whole constellation of other features depends upon job security for their effectiveness. In the Japanese model employees are hired straight from school. Since they are being hired for thirty years or more and are not hired to fill a specific position (there are no detailed job descriptions or precise individual responsibilities), the criterion for hiring decisions is not technical expertise. Instead, qualities such as the ability to learn, to work with a group, loyalty, and commitment are more important. Success in school as measured by test scores and teacher recommendations is one indicator of these personal qualities. This is a partial explanation for the tremendous pressure experienced by elementary and high school students in Japan. Their performance in school is a crucial determinant of

which employer will offer them a job at graduation, and this is the only opportunity most will have to get a job offer from the large prestigious organizations that practice Japanese management.

In Japanese managed firms, employees are viewed as raw material, an investment to be developed. Thus, employees are schooled in the company culture and given whatever training or education the organization might need. They are rotated throughout the various departments in order to acquire an overall view of the organization, become multiskilled, and build relationships with other employees. Rotation and training are less extensive for employees hired from high school who fill lower-level positions and who will not be climbing to the top of the management ladder.

Organizational Culture

Like Western bureaucracies with lifetime employment (e.g., the Methodist Church, the Marines, and the Red Cross), Japanese organizations create and maintain an organizational culture. There is a sense among employees that the organization has a history, a mission, a tradition, certain ways of doing things, and an ideology. Employee orientation programs, company publications, uniforms, songs, stories, social gatherings, celebrations, and ceremonies are organizational mechanisms to sustain and build culture. One of the purposes of organizational cultures is to convince employees that the organization is, in Cole's (1979) terms, a "community of fate." Cole says that in community-of-fate organizations employees believe that they share a common destiny with each other. They will all sink or swim together. This is particularly pertinent in regard to the relationship between management and labor. In a community-of-fate organization, employees believe that they have common interests with management, and they believe that management recognizes the critical nature of their contribution to organizational success. To promote belief in the community of fate, Japanese organizations minimize the overt differences between management and labor. Managers and nonmanagement employees share a common "one employer" work experience and both are assured of lifetime employment. Both wear the same company uniform, park in the same parking lot, and eat in the same cafeteria. Managers are more visible to employees since there are no private offices or private secretaries, and manu-

facturing managers are expected to walk around the plant and interact with employees. Finally, there is less salary disparity between the two groups.

Lifetime employment, organizational culture, and the community of fate encourages workers to view their work as a vocation. This translates into higher employee loyalty to the organization and higher employee commitment to the achievement of organizational goals. Advocates of Japanese management contend that the ability of Japanese organizations to elicit higher employee commitment to the organization in large part accounts for the success of those firms (see Alston 1986; Dore 1973; Ouchi 1981; Pascale and Athos 1981).

Although there are some interesting variations, Japanese management is essentially similar to bureaucracies in regard to the handling of files, rules and regulations, and the practice of viewing administration as a full-time job. Since these features do not distinguish Japanese management, as it is defined in the literature, from traditional Western models of organizing, I will not elaborate these characteristics here.

Two characteristics of Japanese management that are not usually included in descriptions of bureaucracy are quite important to an understanding of Japanese organizations: *welfare corporatism,* an idea first presented by Dore (1973), and *company unions.* Welfare corporatism defines a reciprocal relationship between employees and the organization. In the ideal type Japanese organization employees define their jobs broadly, are willing to do whatever is necessary to assist in organizational success and identify with the organization's goals. In turn, the Japanese organization defines its obligation to employees in a holistic, broad manner. This means that the organization is concerned with the total welfare of the employee and provides a wide range of employee benefits including dormitories for single employees, family housing, or loans to purchase a family house, educational classes (ranging from statistical analysis to flower arranging), access to recreational facilities on site and off (mountain lodges, ocean resorts, etc.), and even assistance in finding a spouse.

Union membership is more common in Japan than in the United States, however Japanese unions are organized differently than American unions. In the United States unions are organized by trade (the United Brotherhood of Electrical Workers) or industry (The United Auto Workers). This format gives members greater power in negotia-

tions with management and represents an alternative claim on employee loyalty. Unionization by industry necessitates that workers recognize the commonalties and interests they share with workers who are employed by other organizations including competitors. Unionization by trade goes even further and serves to divide employees within the same organizations. It suggests that workers from one skill area do not have like interests and circumstances as workers with other skills, even though both work for the same organization. These cross-cutting loyalties can lead to fissures within the organization, threatening the community of fate.

After World War II , unionization was encouraged by the American-inspired Japanese government and, as a result, union membership grew rapidly. However, the trend became less popular with American supporters and Japanese government officials when some of the unions began to join together and became increasingly militant. Citing Andrew Gordon's study of Japanese labor relations, Kenney and Florida (1993, 29) say that "the business counteroffensive was massive. The combination of management, organized under the Federation of Employers, and the state defeated the unions in a series of major strikes during 1949–1950." Japanese businesses established the current self-contained, company-sponsored unions as an alternative representative body for workers to replace the more independent, more powerful, more militant unions that emerged after World War II. These new unions take a less confrontational stance toward management. Understandably so, since managers are usually part of the membership and, in some firms, managers hold a union office as part of their management rotation. Company unions encourage and reinforce employee loyalty to the organization and do not challenge management's power, the community of fate, or other aspects of the company ideology.

Overall then, Japanese management shares with bureaucracy the characteristics of treating administration as a full-time job, positions are to be viewed by the office holder as a vocation, the existence of pyramidal hierarchy (although the shape and certain internal workings vary) and job security, a feature more likely to be shared with public bureaucracies than with private. The two differ from each other in the assignment of responsibilities, decision making, and promotion and salary determination. Finally Japanese management contains certain elements

not found in the Western model: welfare corporatism, community-of-fate ideology, and company unions.

Given our belief that the bureaucratic model is the most efficient and effective way to organize human endeavors, Japanese management should not work very well. Indeed, the general consensus about it during the fifties and sixties among scholars and managers was that it was a hold-over from the not too remote Japanese feudal past. Abegglen said that the lifetime employment system was an economic liability that discouraged innovation and left organizations with the dead weight of older and superfluous workers. A respected Japan expert, Chie Nakane, was especially critical of the seniority pay and promotion system and contended that it would have to be modernized to more closely conform to the Western style if Japan was really serious about competing with American organizations. Imagine the dismay and shuffling of theories when, without changing styles, Japanese businesses became major players in the world's economy effecting what some have called an "economic miracle" in Japan. Suddenly writers, researchers, and managers began looking for the "secret" to Japanese success, and many concluded that the peculiar style of Japanese management is the primary explanation.

Still, there are significant numbers of people who maintain that Japanese companies have achieved success in spite of their organizational style, not because of it. For example, Jon Woronoff (1983) and Wolf Reitsperger (1986) assert that the successful Japanese companies owe their prosperity to their innovative methods of work structuring, plant layout and design, and steadfast attention to detail, quality, and discipline. Other analysts identify external organizational relationships as critical to Japanese management in addition to, or instead of, internal attributes. Hiroshi Okumura (1984) and Michael Yoshino (1968) point out the advantageous features of enterprise groups and advice cartels that are characteristic of Japanese organizations. Enterprise groups (often referred to by the Japanese term *keiretsu*) include suppliers, subsidiaries, a variety of similar-sized manufacturing firms, banks, trading companies, and insurance companies. The relationship a Japanese firm has with other members of its enterprise group, its suppliers and banks, is often exclusive, supportive, and noncompetitive. This facilitates low inventory, "just-in-time" manufacturing, lifetime employment (the smaller suppliers absorb employment uncertainties), and a long-term

perspective, since the major sources of financing are sympathetic enterprise, group banks, and insurance firms.

Advice cartels are working relationships between government ministries, trading companies, financial agencies, and manufacturing firms for the purposes of exchanging information and coordinating policies. This arrangement has supplied invaluable marketing information to firms in their international sales operations and has provided consultation and direction concerning which product lines or industries should be promoted and which should be phased out as a part of national policy.

In addition there are other extra-organizational factors that have often been referred to as important elements in the Japanese success. Such factors as a highly disciplined, well-educated, and subservient work force; a currency that was devalued in the world market below its actual value; state-of-the-art facilities built in the aftermath of the destruction of World War II; financial and technological assistance from U.S. businesses and government; and a high degree of national homogeneity and cohesiveness have all been at some time used as explanations for the Japanese "miracle."

The Significance of the Transplants

Not until the mid 1980s, when Japanese organizations attempted to transplant their style of organizing to their foreign operations, was there any way to isolate and critically examine the effect of some of these elements upon organizational success. Previously, all the significant components of Japanese management were present only in Japanese organizations operating in Japan with Japanese employees. Earlier manufacturing, banking, and trading efforts by Japanese organizations in the United States were managed with the style common in American organizations (Pascale 1978; Lincoln, Olson, and Hanada 1978; Ouchi 1981). Even today, there are a limited number of Japanese companies that organize their overseas operations using Japanese management (Sethi, Namiki, and Swanson 1984; Milkman 1991; Abo 1994). Kenney and Florida (1993), who conducted a large-scale study of Japanese transplants in the United States, inform us that the Japanese automobile, steel, and rubber companies, latecomers to the United States, are convinced that their success depends upon Japanese management and that they can make it work with American employees.

Now for the first time there is a change in the nationality of the work force experiencing Japanese management. We can determine whether the Japanese style of organizing leads to high employee commitment (and ultimately high employee performance) or whether the extraordinary performance of Japanese employees is due to their cultural penchance for hard work (or perhaps to the inordinate amount of social and cultural dependence of Japanese workers on their employer). Put another way, will American workers respond to the Japanese style of organizing by working hard to help the organization achieve its goals? If American workers demonstrate high commitment in Japanese organizations operating in the United States and these organizations are successful, then we will have support for the contention that the way Japanese firms organize human activity is more effective than the standard Western model. There could still be a number of plausible explanations for the success of Japanese companies, such as keiretsu support of the American operations, manufacturing technology, more aggressive marketing, and so on. We will, however, have eliminated the subservient, well-educated, hard-working Japanese work force explanation.

In this context, the study of how Japanese management is enacted with American employees can be quite instructive. This book joins a growing body of scholarship focusing on the Japanese transplants in the United States and Great Britain. These studies are concerned with discovering how the internal organizational features of Japanese firms contribute to company success, posing three distinct but sometimes overlapping explanations (see figure 1). One explanation (referred to briefly above) was first elaborated by Ronald Dore (1973) in a comparative study of a British manufacturer and a Japanese manufacturer, both operating in Great Britain. Dore suggested that Japanese organizations are more successful than their Western counterparts because Japan's late entry into the industrial age encouraged them to heed the lessons taught by Western management specialists (e.g., Taylor and Deming). At the same time their history of nationalism led them to design organizations in which the core values of Japanese culture (e.g., group orientation, harmony, loyalty, respect for age and authority) were protected. Dore called the resulting style of management "welfare corporatism." I use welfare corporatism as the general rubric for the academic literature that claims Japanese organizational success is due to the fact that Japanese management empowers employees, provides job security and

enrichment, and in return, employees display higher commitment to the organization and work harder to achieve organizational goals. Lincoln and Kalleberg's (1990) book is an excellent description and test of welfare corporatist principles.

At the other end of the ideological spectrum is the Toyotism school. I include Parker and Slaughter (1988) here, who call Japanese management "management by stress." Dohse, Jurgens, and Malsch (1985), among the first to use the term *Toyotism*, contend that it is superior to Fordism because it has solved "the classic problem of the resistance of the workers to placing their knowledge of production in the service of rationalization" (128). Put another way, Toyotists charge that Japanese-managed firms have evolved a diabolical system of worker control that is more effective at extracting surplus labor—including intellectual labor—from workers. Toyotists see exploitation where the welfare corporatists see empowerment. Thus, welfare corporatists describe job rotation and multi-skilling as enriching and empowering for workers. Toyotists, on the other hand, conclude that rotation and multi-skilling lead to worker exploitation in Japanese plants in that they provide the means whereby workers can fill in for injured and absent work mates. The ability to fill in for absent work mates makes possible the policy of no replacement workers, which in turn, increases the work load on the remaining workers. In research on Japanese transplants we are confronted with the unusual situation in which the same piece of evidence may support both explanations, depending on how the evidence is presented and interpreted.

The final explanation originates in the industrial engineering literature (Monden 1981, 1983; Ohno 1984; Ossola 1983). This perspective, which I call the production technology explanation, ignores the human resource issues central to the other two explanations and credits the Japanese success to their innovative production technology. Particularly lauded are the just-in-time inventory control system—so-called smart machines, "pull manufacturing," mechanisms for total quality control, plant layout and design for quick changes and retooling—attention to detail, and continuous improvement systems.

Research on Japanese organizations published in the 1970s and 1980s usually fell under one of the three headings with little overlap between them. The majority of work was of the welfare corporatist persuasion (Pascale and Athos 1981; Ouchi 1981; Cole 1979; Rohlen
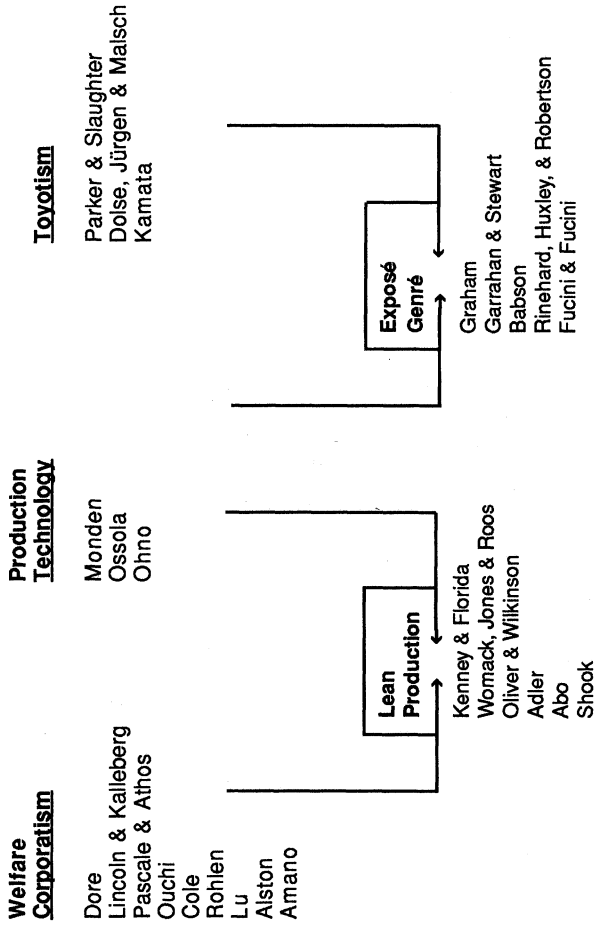
Figure 1. Scholarship about Japanese Transplants in U.S. and U.K.

What is the secret of the success of Japanese organizations?

EXTERNAL FEATURES

1. Advice cartels

2. Japanese culture—education,
   loyalty, and work ethic of
   Japanese workers

3. Keiretsu

Representative authors
   Woronoff
   Okumura
   Yoshimo
   Reitsperger

INTERNAL FEATURES

Welfare Corporatism	Production Technology	Toyotism
Dore	Monden	Parker & Slaughter
Lincoln & Kalleberg	Ossola	Dolse, Jürgen & Malsch
Pascale & Athos	Ohno	Kamata
Ouchi		
Cole		
Rohlen		
Lu		
Alston		
Amano		

Lean Production

Kenney & Florida
Womack, Jones & Roos
Oliver & Wilkinson
Adler
Abo
Shook

Exposé Genré

Graham
Garrahan & Stewart
Babson
Rinehard, Huxley, & Robertson
Fucini & Fucini

1974; Dore 1973; Lu 1987; Alston 1986; Amano 1979; Dreyfack 1982; Gibney 1982; Hasegawa 1986). Kamata (1982) and Woronoff (1983) are among the few at that time whose analyses warn of the sinister nature of Japanese management. Both human resources explanations (welfare corporatism and Toyotism) were largely uninformed by the production technology interest of the industrial engineers, and vice versa. In contrast, the research on Japanese management published in the 1990s features a fusion of the production technology explanation with either welfare corporatism or Toyotism. While adding the production technology orientation to the human resource theories enhances the theories' ability to explain the success of Japanese managed manufacturing companies, the cost is that these newly articulated theories no longer apply to other types of organizations—for example, banks and government agencies.

Two very influential books that reflect the combination of welfare corporatism and the production technology perspective are *The Machine That Changed the World* (1990) by the MIT research team, Womack, Jones, and Roos, and Kenney and Florida's *Beyond Mass Production* (1993). Both sets of researchers contend that the Japanese auto companies (Kenney and Florida add Japanese steel and rubber companies) have created a qualitatively different manufacturing system that lowers the cost of production while at the same time increasing the quality of the product.

That system, called "lean production" by Womack, Jones, and Roos and "innovation mediated production" by Kenney and Florida, is characterized by empowered workers, innovative production technology, and familial supplier relationships. Further, these analysts contend that neither welfare corporatist human resource management, nor Japanese production technology functions effectively alone. Both must be present to realize the efficiencies and quality of Japanese auto manufacturers.

Oliver and Wilkinson (1992) elaborate this position in their study of Japanese transplants in Great Britain. They explain that Japanese lean production technology makes the organization extremely vulnerable to work stoppages, slow downs, sabotage, and so on. Therefore, it follows that successful utilization of Japanese production technology can be achieved only when workers are equally dependent upon the organization. Welfare corporatist human resource management is an

internal organizational mechanism for bonding workers to the organization. Oliver and Wilkinson describe the situation in Japanese managed organizations as akin to the cold war stalemate between super powers called "mutually assured destruction."

Adler's 1992 analysis of NUMMI (New United Motor Manufacturing, Inc.), a joint GM and Toyota plant in Fremont, California, and Shook's (1988) less scientific case study of Honda in Marysville, Ohio, present a closeup view of lean production. The NUMMI analysis is particularly interesting since it examines Toyota's management of experienced UAW workers in the production of Novas (now Geo Prisms). Adler conceptualizes Toyota's management of NUMMI as a "learning bureaucracy" coupled with "democratic Taylorism." Without going into detail here, these innovations refer to Adler's claim that Toyota utilizes "scientific management," in the broad generic sense, with a participative human resource philosophy. At NUMMI, Adler reports, even the most vocal critics of Toyota's management style are in favor of the system. Their criticisms are aimed at flaws in its implementation (114).

The bulk of the new literature about Japanese transplants, however, is not heralding the innovations of Japanese management. Instead, much of it combines the production technology explanation with Toyotism, resulting in highly critical analyses of Japanese management, which I have entitled the "exposé genre" literature. Among this group is the work of Rinehart, Huxley, and Robertson (1995), a Canadian Automobile Workers team of researchers who studied the CAMI (Canadian Automobile Manufacturing, Inc.) plant that manufactures GM Geo Metros and Suzuki Sidekicks at Ingersoll, Ontario. They report a growing disenchantment with Japanese-style management among CAMI employees culminating in a five-week-long strike in 1992 after workers demanded, and eventually received, the right to elect team leaders (which has since been rescinded), a job description for team leaders, and the hiring of replacement workers for injured and absent production workers. The authors summarize their findings as indicating a growing team-based resistance at CAMI to some of management's more excessive demands and policies.

Babson (1995) and Fucini and Fucini (1990) document the discontent of UAW employees at the Mazda–Ford joint venture at Flat Rock, Michigan. There, too, the team-leader role was one source of conflict between management and workers and, as at CAMI, the union

was able to negotiate the right for workers to elect and recall their team leaders. Babson believes that the presence of the UAW made possible adaptations in the Japanese style of management, team-leader elections as only one example, which have created more worker-centered work teams.

Although both CAMI and Mazda at Flat Rock are unionized, most Japanese auto transplants are not. Without union support, researcher access has been restricted to primarily superficial information supplied by management contacts. Thus, there is a dearth of "in-plant" and worker-oriented research about nonunionized transplant operations. Graham (1995) solved the problem of access by becoming a production employee at the Subaru Isuzu Automotive (SIA) facility at Lafayette, Indiana. Her analysis of the SIA production system reveals worker empowerment coupled with heightened managerial control (through the mechanisms of work standardization and low team leader-to-worker ratios). She challenges Kenney and Florida's conclusion that Japanese auto companies have successfully transferred their style of management to the United States. Particularly debunking of the community-of-fate ideology, according to Graham, are the signs of worker resistance evident on the SIA shop floor. Graham contends that researchers who lack knowledge of the day-to-day work life of employees may arrive at erroneous conclusions about the successful implementation of Japanese lean production in the United States.

In a scathing criticism of Nissan at Sunderland in Great Britain, Garrahan and Stewart (1992) charge the company not only with exploiting its British employees but also with abusing the British economy and nation. Garrahan and Steward maintain that Nissan forced the British government to provide generous subsidies for it's G.B. plant, externalized some of the risks and costs associated with auto manufacturing to local suppliers, and brought to Great Britain only low-skill, low-tech assembly jobs. They criticize aspects of Nissan's production technology for ultimately leading to worker deskilling, and for creating fear and stress among workers. Garrahan and Stewart conclude that Nissan's indoctrination of employees has been so effective that they do not know they are miserable.

Putting aside Garrahan and Stewart's inflammatory tone, their analysis offers a valuable insight into the internal dynamics of lean production organizations. They state that "at Nissan people are encouraged

to view work problems as personal issues about which the company can do little" (115). Put another way, Nissan has evolved a system that encourages workers to take personal responsibility for the organizational problems of manufacturing a high-quality vehicle as efficiently as possible. Policies and procedures used by Toyota to encourage workers to take personal responsibility for cost reduction and product quality are elaborated later in this book and elsewhere (Besser 1995). However, at least in Toyota's case, this is a reciprocal relationship where the company assumes some responsibility for certain employee personal issues such as child care and personal health.

I position my research in both camps. I find that lean production as practiced at TMM is extracting more surplus labor than would occur in a traditional manufacturing plant. Production work at TMM is monotonous and mind numbing in spite of job rotation, team work, and job enlargement programs. However, those facts alone are not sufficient in my mind to condemn the lean production system, given the current economic climate. I concur with Berggren (1992) that from a pure quality-of-work life perspective, the craft teams utilized by Volvo are preferable to lean production. Nevertheless, the cost of producing an automobile this way makes the system unsustainable. Volvo's craft team manufacturing cannot compete with either Fordist producers or lean production plants. The Uddevalla plant, Volvo's showcase of the craft team system, has been reorganized since Berggren's book was published.

The research reported in this book adds to the existing scholarship in three ways. First, we will examine a variety of dimensions within the organization—for instance, the official policy, the views of critical and contented workers, managers (as official spokespeople and as employees), office staff, and Japanese managers—and show how they relate to each other. I agree with Graham that management's take on the organization's culture is incomplete, but so also is the workers' perspective. This book attempts to give voice to a broader cross section of organizational actors. In so doing, we are able to consider issues not addressed by the other research, such as the situation of injured workers, the stress of managers, the women of Toyota, and the implications of routine monotonous assembly work to the lean production system.

Second, a theoretical framework is presented here which explains how the principles of Japanese management are translated by TMM into the day-to-day actions of workers through organizational policies, procedures, and structure. I will show how the Toyota culture is recreated at TMM and how it is changed to accommodate American norms, laws, and values.

Finally, this study is unique because it is about Toyota. Mazda, Nissan, Honda, Suburu, Mitsubishi, Izuzu, Suzuki, GM at Saturn, and Ford have all, with varying degrees of success, attempted to emulate Toyota's production system. Toyota is the standard by which other car manufacturers measure themselves. Indeed, both Womack, Jones, and Roos and Kenney and Florida find a qualitative difference between Toyota's plants in quality and efficiency compared to all other car manufacturers. Even the strongest critics of Japanese management pay Toyota tribute by recasting Japanese management as Toyotism. How Toyota transplants its production system and organizational culture to the United States is important because Toyota is the elephant among the lean production manufacturers.

The purpose of this research originally was to develop a theory to explain what work is like for American workers at a Japanese organization in the United States. During the course of the study—the subsequent rereading of transcripts, data, and documents and then writing and thinking about this topic—it became obvious to me that the most important phenomena occurring at this plant is the transplantation of the Toyota team culture. Toyota's management was using a variety of policies, structures, and procedures to create and nurture the Toyota team philosophy among their U.S. employees. As I describe what work is like for American TMM employees, I will use the team concept as an organizing format, as a way to integrate, explain, and make sense of what happens at TMM. In the conclusion I will return to the bureaucratic and Japanese management models to ascertain if TMM U.S.A. conforms to our understanding of Japanese management and, if so, what implications that has for organizations.