

Nearly a half-century ago, General MacArthur ordered Homer Sarasohn to tell Japanese businessmen how things were done. The Japanese listened, but the U.S. forgot.

A lesson learned and a lesson forgotten

By Robert Chapman Wood

WHAT THE JAPANESE learned about management after World War II, they learned from the Americans.

And the Americans forgot their own lessons."

There is a lot of truth in that statement. Only a few decades ago, the world, Japan included, looked to the U.S. for management models. Now we look to the Japanese. How did this reversal of roles come about?

A good man to ask is the one who made the above statement, Homer M. Sarasohn. He was among the very first who taught Japanese business people how the Americans did it, and he was in a strategic position to watch the unfolding of the drama of U.S. industrial decline and Japanese industrial rise. Returning to the U.S., Sarasohn built a successful career that included serving as director of engineering communications at IBM headquarters in Armonk, N.Y. Sarasohn believes that his former employer has retained the elements that once made the U.S. the envy of the industrial world. But our industry as a whole has lost it, he sadly fears.

Living in retirement at age 72, in Scottsdale, Ariz., Sarasohn recently gave FORBES his views on how it happened that the Japanese learned from us while we forgot our own lessons.

In a long interview, he not only told us how it happened but gave his views on what we can do to recover what we lost. Here's the story.

In 1946 General Douglas MacArthur was commander of the U.S. Occupation forces in Japan. He urgently

wanted Japan to mass-produce radios so that the U.S. Occupation authorities could reach every Japanese village quickly with its messages.

Sarasohn, the son of a midwestern manufacturing representative, had worked as a radio product development engineer at the old Crosley Corp. (long since absorbed into what is now Textron) during World War II. He went on to work on radar as an engineer at MIT and Raytheon after the war, becoming part of an exclusive fraternity of young engineers.

In 1946 Sarasohn received a telegram: "General MacArthur's headquarters has requested your services earliest possible date." Brandishing the now-yellowing telegram, Sarasohn recalls thinking it was a joke. When a call from an irate colonel convinced him it wasn't, he decamped for Tokyo. He was 29 years old.

MacArthur wanted Sarasohn to help the Japanese produce the radios and communications equipment dear to the general's heart. Sarasohn found that while the Japanese knew a fair amount about electronics, they seemed to know nothing of modern management or production techniques. Sarasohn recalls:

"They thought that quality meant making half of your products okay and throwing out the other half. They couldn't understand why they shouldn't make vacuum tubes in a shack with a dirt floor. [Air filled with dust particles produced defects when dust landed on filaments.] I decided that I was going to be a dictator." At age 29 he took a role in much of the electronics industry analogous to the role MacArthur himself took toward Japan as a whole: a dictator who paradoxically demanded "democratic management." In four years, this democrat in dictator's clothing may



have accomplished more than any economic dictator in history.

Initially, Sarasohn spent much of his time finding materials the Japanese needed to get radio parts into production. Soon a trickle of miserably unreliable radios was reaching Japan's villages. Sarasohn kept prodding for improved productivity and better management.

In 1948, Sarasohn was joined in the Occupation forces' Civil Communications Section by Charles Protzman, a Western Electric engineer. They concluded the Japanese would never produce quality unless someone taught them modern management, starting with the basics. So in 1949 the pair of young Americans proposed a course for top Japanese managers.

Robert Chapman Wood is a business consultant and writer based in Rockland, Mass.



Graduates of the Civil Communications Section's management course, Osaka, 1950

The Americans (front row center, left to right): Homer Sarasohn, Frank Polkinghorn, Charles Protzman.

And here's the rub: Most of the principles Sarasohn and Protzman taught in the course are principles that Americans now think of as Japanese attributes. The Japanese quickly saw the sense of it. They liked the course so well they were still repeating its teachings 25 years later in a standard course for people on the track to top management.

Sarasohn and Protzman's pupils went on to become a Who's Who of Japan's electronics industry. They included Matsushita Electric's Masaharu Matsushita; Mitsubishi Electric's Takeo Kato; Fujitsu's Hanzou Omi; Sumitomo Electric's Bunzaemon Inoue; Akio Morita and Masaru Ibuka, the founders of what is now Sony Corp. This cadre of leaders

spread the principles throughout Japanese industry.

Matsushita Electric's Masaharu Matsushita recalls the course clearly:

"I believe this seminar was very useful to Japanese manufacturers at that time. Mentioned on the first page of this seminar's text was the title, 'The Objective of the Enterprise,' under which the philosophy of corporate management—the social mission of the enterprise—was clearly explained, and this made a deep impression on the participants of this seminar.

"The theories in the seminar may well be used today," Matsushita adds, "especially the concept about the social mission of an enterprise as the objective of the enterprise."

The Occupation's Economics and

Social Section objected to the seminar. "They said we might be too successful," recalls Sarasohn. It was perhaps the understatement of the century. But both the ESS people and the CCS engineers made 20-minute presentations before MacArthur. The ESS warned of the perils of Japanese competition. Sarasohn insisted that it would ultimately be more practical to teach the defeated and starving nation to be self-sufficient. After both sides had finished, says Sarasohn, MacArthur turned to him, snapped, "Go do it," and walked out of the room.

Sarasohn and Protzman were followers of scientific management in the tradition of Frederick W. Taylor. When people today think of Taylor (if they think of him at all), they tend to

On September 13, 1988, IBM further advanced its family of Enterprise System/9370™ computers by adding three new models, all with significant price/performance improvements.

The addition of Models 30, 50 and 80 provides customers with more flexible solutions for the needs of most any size business.

This was very enterprising news for enterprising businesses.



© Copyright IBM Corporation 1989. Enterprise System/9370 is a trademark of the IBM Corporation. IBM is a registered trademark of the IBM Corporation.

On September 20, 1988, IBM introduced a broad range of enhanced networking and network management software, including new releases of NetView™ and NetView/PC, IBM's industry-leading network management products.

With the NetView family of products, customers can better manage their increasingly large, multi-vendor networks and systems more efficiently and effectively.

That's managing information.



© Copyright IBM Corporation 1989.
NetView is a trademark of the IBM Corporation.
IBM is a registered trademark of the IBM Corporation.

think of dehumanizing time-motion studies, as made famous in Charlie Chaplin's *Modern Times* and in *Cheaper by the Dozen* by Frank Gilbreth Jr. and Ernestine Gilbreth Carey. This does an enormous disservice to Taylor and to the scientific management Sarasohn and Protzman taught. What Taylor principally urged was what came to be known as the systems approach to manufacturing: the idea that every part of a factory or a whole organization should be scientifically analyzed and redesigned to achieve the most efficient output. Managers should look at every aspect of a manufacturing operation as a piece of an integrated system, and should think through the consequences for the entire system of fiddling with any of its parts. Unfortunately, as the power of the human relations movement grew in the 1950s and 1960s, this eminently sensible systems approach to running a business came to be considered in-

In 1946 Sarasohn received a telegram: "General MacArthur's headquarters has requested your services earliest possible date." Brandishing the now-yellowing telegram, Sarasohn says he thought it was a joke. When a call from an irate colonel convinced him it wasn't, he left for Tokyo. He was 29.

sufficiently sensitive to human needs and wants, too mechanical.

But when Sarasohn and Protzman began their course, U.S. management still thought along industrial engineering lines. The M.B.A. was still a rarity. Many managers studied engineering and science in college, then learned management on the job. Literally on the job. Typically, they did not start out as "managers" but did stints in every part of their organization. U.S. managers generally knew what it was like to work a lathe or serve on an assembly line. Business, like the army, was not a democracy, but managers tended to be up-from-the-ranks types, chosen purely on merit rather than on educational qualifications.

Here, as Sarasohn presented it, was the gist of the message he imparted to his Japanese pupils:

- Every company needs a concise, complete statement of the purpose of the company's existence, one that provides a well-defined target for the idealistic efforts of the employees.
- Companies must put quality ahead of profit, pursuing it rigorously with

With the introduction of five new software products on September 20, 1988, IBM became one of the first U.S. manufacturers to incorporate into their machines systems network programs based on international standards.

Taking advantage of Open System Interconnection (OSI), a set of international standards and protocols, IBM computers are now "multi-lingual": they can talk to networks of IBM machines or any other manufacturer's.

And that's got everybody talking.



© Copyright IBM Corporation 1989. IBM is a registered trademark of the IBM Corporation.

On October 12, 1988, IBM entered into an agreement with Steve Jobs and NeXT that allows IBM to bring the NeXT advanced graphical interface to IBM's AIX™ workstations.

Who knows what's next?



© Copyright IBM Corporation 1989. AIX is a trademark and Personal System/2 is a registered trademark of the IBM Corporation. IBM is a registered trademark of the IBM Corporation. NeXT is a trademark of NeXT, Inc.

techniques such as as statistical quality control.

• Every employee deserves the same kind of respect fellow managers receive, and good management is "democratic management." Lower-level employees need to be listened to by their bosses.

After MacArthur approved the course, Sarasohn and Protzman quickly wrote a text. (A revised edition entitled *CCS: Industrial Management* is in the Harvard Business School library.) They drew heavily on U.S. management texts, and stressed the basics. For example, they wrote:

"Even though you know these things [management principles], you are not applying them in a logical manner. . . . People at low levels who should be responsible and accountable are confused. . . . Any initiative and interest they [workers] may have in trying to do a job is often destroyed by interference and meddling."

On the first page, a motto used at Newport News Shipbuilding was cited: "We shall build good ships here; at a profit if we can, at a loss if we must, but always good ships."

"It was much to the participants' surprise," recalls Masaharu Matsushita, "to find such a basic policy on corporate philosophy on the first day of the seminar, on the first page of the text. This point made an impression on all the participants. The case study about clarification on the organizational concept for the management division as well as the management theory based on the systematic analysis of business facts and data—all furnished us with much information."

No question: The Japanese took the American message to heart, even as the Americans were forgetting it.

Sarasohn and Protzman wrote: "Every business enterprise should have as its very basic policy something of this nature, [to aim] the entire resources and efforts of the company toward a well-defined target, a target that would benefit society." Today, most Japanese companies have such a statement of basic policy.

Like many of America's best engineers at the time—and like many Japanese managers today—Sarasohn and Protzman saw no conflict between "scientific" management that carefully measured and analyzed everything about a company, and "democratic" management that fully respected employees. They disagreed with "human relations" experts, who were starting to stigmatize practitioners of scientific management on the grounds that scientific management focused on nuts and bolts whereas

managers should care principally about people. Sarasohn and Protzman presented to Japanese business leaders both scientific management and America's tradition of respect for the common man.

The point was not lost on the Japanese: If you have articulated a worthwhile purpose and you constantly strive to create the best manufacturing system—culture, in today's jargon—possible, your human relations problems will tend to take care of themselves.

Sarasohn and Protzman advocated "democratic management" within a traditional, hierarchical organization. That meant that, while the boss was still the boss, he didn't so much bark orders as listen to the people who worked for him. He was the voice of the organization, not its dictator. "A leader's main obligation is to secure the faith and respect of those under him," wrote Protzman and Sarasohn.

Matsushita Electric's Masaharu Matsushita recalls the course clearly. "I believe it was very useful to Japanese manufacturers at that time." It was "the light that illuminated everything," wrote Bunzaemon Inoue, who became technical director of Sumitomo Electric.

How many U.S. managers today believe that, let alone practice it?

The Japanese, humbled by their military defeat and acutely aware of their country's economic plight, were in a learning and listening mood. They repudiated their feudalistic and militaristic ways and promised to lead new lives. The course was "the light that illuminated everything," wrote one executive, Bunzaemon Inoue, who went on to become technical director of Sumitomo Electric.

After the course was offered for the second time (in Osaka in 1950), the Occupation was near its end. But the course did not die. Its old students spread the message, both through their own businesses and through word of mouth. Later on, the CCS course became a standard in the training program associated with the Nikkeiren, the Japan Federation of Employers' Associations.

Before returning home in 1950, Sarasohn established Japan's Electrical Testing Laboratory. He introduced the certification for electronic products that the U.S. government would

On November 24, 1988, IBM announced no new families of processors, software, peripherals or communication devices.

Most IBM employees were at home with their families. It was, after all, Thanksgiving.



© Copyright IBM Corporation 1989. IBM is a registered trademark of the IBM Corporation.

By the end of November 1988, IBM Business Partners worldwide had already developed over 3,000 software applications for the Application System/400™ (AS/400™) business computer.

With all these applications, it's clear the AS/400 means business.



© Copyright IBM Corporation 1989. Application System/400 and AS/400 are trademarks of the IBM Corporation. IBM is a registered trademark of the IBM Corporation.



criticize as a "nontariff barrier" 30 years later. While certification in the U.S. focused largely on safety, Japan set continually increasing performance standards for products. By the early 1980s, many American products weren't able to meet its demanding standards.

The man that is most responsible for bringing the Sarasohn-Protzman course to light and spreading its message today is Kenneth Hopper, an industrial consultant associated with Management Advisory Associates in Bowling Green, Ohio. Back in 1948, when Sarasohn was still working in Japan, Hopper went to work for Procter & Gamble in Manchester, England as an industrial engineer.

"U.S. management was evolving in directions that would now be described as 'Japanese,'" Hopper recalls. European companies, like most Japanese companies before World War II, kept people on well-defined tracks. University graduates spent little time in factories. But at Procter & Gamble and many other U.S. companies, engi-



Matsushita Electric's radio tube operations, Osaka, 1948
The Japanese took the American message to heart.

neers like Hopper spent years on the factory floor. Six months after becoming a design engineer, Hopper was appointed as a foreman in maintenance.

U.S. firms were introducing wave after wave of improvements in technology and knowhow. Communication between engineers and ordinary factory workers—evidence of what Sarasohn and Protzman would call "democratic management"—made their successes possible. The practical knowledge of ordinary workers fertilized the expertise of the engineer, and

the workers had quick access to engineers' knowledge. It was a revelation to a young man brought up in the class-conscious, ossified English system—as it would be to a young manager brought up in U.S. manufacturing from the mid-1960s to the present.

In the 1960s, Hopper decided on an academic career. But he found that he had quite different ideas from the academics about what made the U.S. system work. The practical people who had built the U.S. corporations communicated

poorly with the academic elite. Innovative business scholars showed little respect for how factories were managed, preferring to write about marketing, financial techniques and "human relations."

Hopper got a one-year grant to study at Harvard Business School in 1965-66, but while there he couldn't find a professor to sponsor his Ph.D. dissertation on the use of college graduates as foremen. So he went back to a career as an industrial consultant but refused to give up on communicating

what he now calls "classic American management." In 1969 Hopper met former Mitsubishi Electric executive Takeo Kato. Kato led him to Frank A. Polkinghorn, who had been Sarasohn and Protzman's immediate boss when they taught the CCS course. Hopper has been collecting details of their achievements ever since.

The real irony, of course, is that Hopper believes that the U.S. excellence of the 1950s and the Japanese excellence of the 1980s have closely related roots. And he has watched the decline of the American management systems that produced "Yankee know-how" with anguish and dismay—in much the same way many serious scholars watch the sickening decline of American educational standards.

Hopper notes that Protzman, who wrote many of the sections of the CCS course that dealt with human relations, had been a foreman at Western Electric's Hawthorne plant in the 1920s. At the time, the famed Hawthorne experiments, which underlay the human relations movement in management and ultimately undermined scientific management, were being conducted. At Hawthorne, scholars looked at how changes in the work environment affected productivity, concluding that productivity would rise if managers concentrated on workers' needs. As Cornell University professor of manufacturing L. Joseph Thomas puts it: "It

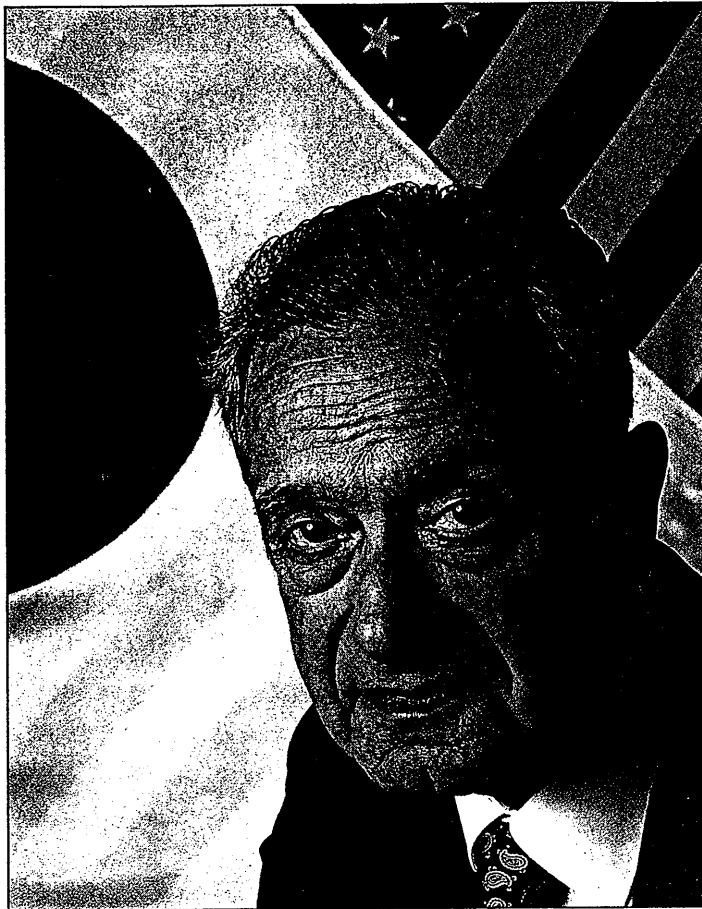
became fashionable to think that measuring a person's work devalued him. Rather, you should simply trust people to do the right thing." This was the death of the systems, or industrial engineering, approach. And the birth of the human relations approach to management.

Hopper spent a lot of time talking with Protzman. Protzman, who died in 1987, concluded the Hawthorne experiments were meaningless. Protzman felt that good managers didn't need elite consultants to tell them how to treat humans as humans and that scientific management-based systems were entirely consistent with

humane management.

"The people in the human relations movement set themselves up as a kind of high priesthood that would teach how factories could be run better," says Hopper. "Suddenly it seemed that these people knew how factories should be run better than the people who worked in them."

Japan went the other way. Its approach, descended from both Japanese tradition and Occupation teachings, had no high priests, no specialized human relations experts. Instead, ev-



Jeff Dodge

Homer M. Sarasohn today

"I decided that I would become a dictator."

everyone was supposed to be as sensitive to human relations as to finance or technology.

Today Japanese management has developed far beyond what a handful of Americans taught a half-century ago, adding exclusively Japanese elements and refining what the Japanese learned.

In 1950 Sarasohn returned from Japan to find many changes at home. "Two things struck me immediately," he recalls. "First, there was an attitude of self-satisfaction—we'd won a war, and there was nothing else to be done. And second, there was already a great emphasis on achieving

demonstrable success immediately, on getting an immediate return on the buck." As a Booz, Allen consultant, Sarasohn worked for H.J. Heinz in Pittsburgh, and he says: "They wanted me to upgrade their distribution system, at a time when their product manufacturing system was not meeting its reasonable objectives."

Now as then, he says, "Few American managers show any sense of the long-term implications for their companies and their customers of what they are doing in their business."

What would Sarasohn do today to make the country's factories more competitive? One thing he would not do is try to play catch-up with the Japanese by copying them.

"This present-day fad of aping the Japanese style of management is absolutely destructive of our own future," he says. "We've got to recapture the enthusiasm, the pioneering spirit that made America a world leader."

There are no pat answers, but the key is to create more companies like IBM and Hewlett-Packard—more companies, in brief, where the workers identify with the enterprise. "All my life I fought against becoming a 'company man,'" says Sarasohn. "And then I joined IBM [in 1957]. Under Tom Watson [both junior and senior], the company showed respect for its workers; it was committed to honesty with its customers; and it saw itself as an institution

with social responsibilities. When I was visiting a branch office and saw that their attitude toward their customers was perfunctory, I was quite shocked. Then I looked at myself and said, 'Hey, I've become a company man.'"

Capturing their employees' imaginations—getting them to expend their energies for something less tangible than a paycheck—is the greatest challenge managers face today. With help from a couple of young Americans more than four decades ago, the Japanese have excelled at this challenge. Now it's America's turn again. ■