W. EDWARDS DEMING: THE MAN AND THE LEGEND

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The following obituary/tribute to W. Edwards Deming was written by Jerry Bowles, editor of The Quality Executive, a monthly newsletter on quality issues. It appeared in the January 1994 issue. Jerry Bowles is co-author of the book Beyond Quality and the writer of FORTUNE magazine's annual quality supplement.

In every field of endeavor there are people who are famous for being unknown. W. Edwards Deming was the ultimate manifestation of this peculiar art. From the moment of his "discovery" by American management in an NBC television documentary in 1980 until his death last month on December 20, Deming never lost his carefully cultivated image of an "outsider," the "prophet who was ignored in his own country," an "antiestablishmentarian," who liked nothing better than telling chief executives (and fellow members of the quality establishment) what they were doing wrong. In truth, he was the most famous quality guru in the world, a man welcome in any boardroom or factory floor, deeply admired by even those whose feathers he ruffled, which was pretty much everybody.

He blamed management for most of America's ills but perhaps his most revolutionary message to the managerial classes was his fundamental belief in the competence of the average worker and his or her willingness to work hard and work well, given an environment in which the worker was permitted to think and exercise control over quality. With "empowerment" now the rage (if not necessarily the reality), that message has gained widespread acceptance.

William Edwards Deming was born in Sioux City, Iowa, on October 14, 1900. His father, a not-very-successful rural attorney, was from Woodbury County, his mother from around Perry. When he was 4, the family moved to a 300-acre farm near Polk City owned by his grandfather. Two years later, the family moved to Powell, Wyoming. Although his family was poor, Deming worked hard and received a bachelor's degree in electrical engineering from the University of Wyoming and earned a master of science degree in physics from the University of Colorado in 1924. He taught physics at CU before and the Colorado School of Mines before going to earn a Ph.D. in physics from Yale in 1927.

The early hardscrabble days left a deep impression on Deming. Although he earned millions in fees in his later years, he never lost his aversion to waste. He drove a 1969 Lincoln Continental and took the bus or subway until he began needing a wheelchair two or three years ago. He worked out of his modest Washington, D.C., home in a basement office around the corner from a washer and dryer. He had one full-time assistant, Cecilia "Ceil" Kilian, who was with him for 39 years. When his health permitted, he worked six days a week, usually 7 a.m. to 7 p.m. He used a felt tip pen to date the eggs in his refrigerator to ensure the oldest were used first and no egg ever went bad.

In 1992, the University of Colorado announced the establishment of a Deming chair. It was attributed to an anonymous donor, but Richard Seebass, CU engineering dean, said Deming endowed the $500,000 chair himself. "He didn't want to be pestered for money," Seebass said.

Deming in Japan

I encourage to visit this site and read an alternative view about Deming's contribution to Japan, as well as one of the speeches he made in Japan in 1950.

Deming is generally credited with the post-war introduction of quality concepts to Japan, although the reality is much more complicated and there is considerable evidence that he learned as much from Japanese thinkers like Kaoru Ishikawa and Taichi Ohno as he taught them.

Indeed, one of the great myths of the modern quality revolution is that it began with a series of eight lectures given in Japan in 1950 by Deming. Deming had first gone to Japan in 1947 to help the U.S. Occupation prepare for the 1951 Japanese census. While there, he met and socialized with a number of members of the Japan Union of Scientists and Engineers (JUSE), Japan's most important quality control organization, founded in 1946.

Deming biographers point in particular to a dinner at Tokyo's Industry Club on July 13, 1950, in which he told the presidents of 21 (in some interviews Deming says 45) leading manufacturers that if they would only use statistical analysis to build quality in their products, they could overcome their reputation for shoddy quality within five years.

One might reasonably wonder why so many senior business leaders turned up to hear an obscure Census Bureau statistician deliver a lecture on an esoteric, effectively untranslatable subject in a language that virtually none of them understood.

The answer is that both they, and Deming, had been invited by Ichiro Ishikawa, a wealthy industrialist who, in addition to being president of JUSE, had also served as the first president of Japan's Keidanren, the Federation of Economic Organizations (FEO). On the surface, FEO sounds like some sort of benign industry trade group. In fact, it is an organization with the power -- sometimes exercised -- to topple prime ministers and change the course of the nation.

Set up in August 1946 under the aegis of the government and the occupation, FEO is an all-inclusive, all-powerful organization composed of more than 750 large corporations and 100 major national trade associations. It is the supreme coordinating body of what Americans call "Japan, Inc.," and its main purpose is "to maintain close contact with all sectors of the business community for the purpose of adjusting and harmonizing conflicting views and interests of the various businesses and industries represented in its huge membership. It is the front office of the business community and is in effect a partner of the government."

In 1950, refusing an invitation from Ishikawa was about as sensible as refusing a request from Don Corleone. It is unlikely, however, that Ishikawa wanted the business leaders there to be introduced to the concept of statistical quality control, for the simple reason that statistical methods had been introduced four years earlier and were already being widely promoted in Japanese industry.

A more likely reason for Ichiro Ishikawa's Deming dinner is that he wanted Japan's new industrial leaders to hear, from this tall, loud, terrifying *gaijin* -- a slightly derogatory word used to connote anyone who isn't Japanese -- what has been Deming's central message for the past 60 years: that they -- management -- were the problem, and that nothing would get better until they took personal responsibility for change.

And on that score Deming delivered. In a speech in Tokyo in November 1985, Deming recalled the dinner: "I did not just talk about quality. I explained to management their responsibilities. Management of Japan went into action, knowing something about their responsibilities and learning more about their responsibilities."

But, according to Kaoru Ishikawa, Ichiro's son, who would become Japan's leading quality guru, the

Japanese quality movement made limited progress in the years immediately following Deming's 1950 visit. And, despite his father's pivotal role in bringing Deming to Japan in the first place, the younger Ishikawa maintained a deliberate distance from Deming throughout his life.

In the Japanese edition of a book on Deming, Ishikawa noted that Deming had borrowed many of the ideas for his famous Fourteen Points (the first ten or so of which were written in the mid-1960s, not as is often assumed earlier) from Japanese Total Quality Control (TQC) and J. M. Juran. This heretical passage does not appear in the English translation.

In fact, when Deming made his dinner speech on statistical process control (SPC) before Tokyo's Industry Club in the summer of 1950, SPC was already being widely promoted in Japanese industry. It had been introduced as part of the post-war reconstruction effort.

Shortly after Japan's surrender, the Civil Communications Section (CCS) was established by the Allied Command to help rebuild the country's telecommunications infrastructure. General MacArthur urgently wanted Japan to mass-produce radios so that Occupation authorities could reach every Japanese village quickly. The section's small Industrial Division was assigned to work with Japanese manufacturers of communications equipment, whose products at the time were highly unreliable.

Except for Homer Sarasohn, who had worked as a radio product development engineer at the old Crosley Corp. (now part of Textron), the group's key engineers -- W. S. Magil, Frank Polkinghorn, Charles Protzman -- had all worked at Western Electric or Bell Labs, the birthplace of American quality control. Indeed, it is Magil -- not Deming -- who is the father of statistical quality control in Japan, having advocated its use in lectures in 1945 and 1946 and successfully applied its techniques to vacuum tube production at Nippon Electric Company in 1946.

From 1945 to 1949, the CCS engineers worked on a variety of projects, including establishing the Electrical Testing Laboratory to certify that quality standards were being met, advising Japanese business leaders on production management, and generally upgrading working environments. During 1949-50, Sarasohn and Protzman organized a series of eight-week courses on industrial management to which only top executives in the communications industry were invited.

Among the students were 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. The courses were so popular that they continued for another 24 years after the Allied command was disbanded.

Kaoru Ishikawa (the son of Ichiro, who had invited Deming to speak) was familiar with statistical methods through the Western Electric engineers' work at NEC and NTT and had been influential in helping JUSE launch a magazine called Statistical Quality Control, several months before Deming's visit.

Deming's Real Contribution

This slightly revisionist history is unlikely to make Deming loyalists happy, but his greatest contribution to the quality revolution may well stem from two spectacular, and seemingly accidental, public relations coups.

First, there are the prizes that bear his name. Knowing Japan's poverty, Deming refused any payment for his 1950 lectures and JUSE used the proceeds from reprints to create the Deming Application Prize, a prestigious award given annually since 1951 to companies with outstanding total quality programs, following a rigorous audit of their operations, and the Deming Prize, an award given to outstanding individuals. The awards -- medals bearing Deming's likeness -- are given each year with great fanfare and

attendant publicity.

Despite that measure of fame, Deming might well have remained relatively unknown in his own country had he not been "discovered" in 1980 by Claire Crawford-Mason, a veteran news reporter and TV producer, who was putting together a documentary on the decline of American competitiveness for NBC called **"If Japan Can... Why Can't We?"**

At the suggestion of a faculty member at American University in Washington, she looked up Deming in his basement office in American University Park. She was amazed to find a man who seemed to know the answer to the program's provocative question living and working about five miles from the White House. Best of all, from the viewpoint of a TV producer in search of an exclusive, virtually nobody outside the rather arcane world of quality control had ever heard of him.

"If Japan Can...Why Can't We?" aired on June 24, 1980. The final 15 minutes were devoted to Deming and his consulting work at Nashua Corporation, a New Hampshire manufacturer of carbonless paper. Among other things, Deming told the interviewer: "I think people here expect miracles. American management thinks that they can just copy from Japan. But they don't know what to copy."

The show was one of the most successful business documentaries ever, and it turned Deming into a celebrity literally overnight. The next day, his office was bombarded with phone calls. This was 1980, remember, and a lot of American companies were looking for something -- anything -- that might help them stem the tide of red ink.

Deming's message was a wake-up call for American industry. Across the nation, the best senior executives heard the alarm. Among the early callers was Ford, which credits Deming's philosophy with spearheading its amazing comeback in the 1980s. Besides Ford, notable Deming disciples include Kmart, Hospital Corp. of America, and Florida Power and Light, the utility that in 1989 became the first U.S. entrant to win the Deming Prize for Overseas Companies, an offshoot of the Japanese annual award.

While Deming clearly did not "discover" quality or "introduce quality to Japan," he did as much as anyone to introduce quality to America, at a time when it needed the message. He was the spiritual force behind the quality improvement revolution that swept through thousands of American manufacturing and service companies in the 1980s.

Someone once asked Deming how he would like to be remembered in his native land. "I probably won't even be remembered," he replied, adding after a moment's pause: "Well, maybe ... as someone who spent his life trying to keep America from committing suicide."

In retrospect, it seems obvious that Deming understood that he could get his message across best by remaining an outsider. The last time I saw him was two years ago on the 10:30 a.m. shuttle from Washington to New York. It was the morning the Baldrige Awards were being given out in Washington and, as usual, Mr. Deming was going in a different direction.

One More Time:
Deming's "14 Points for Management"

1. Create constancy of purpose.

2. Adopt the new philosophy.

3. Cease dependence on inspection to achieve quality.

4. Cease doing business on the basis of price tag alone.

5. Improve constantly and forever the system of production and service.

6. Institute training on the job.

7. Institute leadership.

8. Drive out fear so that everyone may work effectively.

9. Break down barriers between departments.

10. Eliminate slogans, exhortations and targets.

11. Eliminate numerical quotas.

12. Allow pride in workmanship.

13. Institute a program of self-improvement.

14. Put everybody in the company to work to accomplish the transformation.