Chapter 12

Impressions of Prof. Kaoru Ishikawa by Overseas QC Experts

12.1 Prof. Ishikawa and Asia

(1) China

Memories of Prof. Ishikawa

Han Qing-yu

My first encounter with Professor Kaoru Ishikawa goes back to April 1975, when I approached him to request him for an article on "Quality Control in Japan" for the Chinese-language engineering magazine *Japanese Industrial Technology* in my capacity as a representative of Hakuyo-sha, its publisher.

Professor Ishikawa wrote his original article "Quality Control in Japan" for us and we translated it in Chinese. The article was featured in four consecutive issues of the magazine. Later, China proceeded with "Four Modernizations" and Science and Technology was highlighted as one of its critical elements, leading to a rush of introductions of more advanced technologies from other countries. As a result, the writings by Professor Ishikawa attracted high publicity and became immensely popular.

This spurred the Chinese government. Its Economic Committee, through its affiliate called China International Trade Promotion Commission, invited him to visit China. A mission was set up comprising members from the companies that Professor Ishikawa referred in case studies in his article. This 13-member Japan Quality Control Exchange Group travelled to China in August of 1978. I accompanied the mission as a caretaker and Secretary-general. The mission held a week-long seminar in Tianjin that attracted a large number of engineers from across many places in China. This event proved to be a trigger to transplant Japanese QC to China. Today, almost all factories in China are promoting TQC of Japanese style.

This kind of technical exchange led to increased interaction between much robust Japan-China communication. Until then, Hakuyo-sha as private business was coordinating the exchange and events, but we realized a new legal entity to organize entire business segments would be more desirable. On 24 October of that year, the day Japan-China Peace Treaty took effect, we launched "Japan China Technology and Culture Center" with Professor Ishikawa as its President. On 28 January 1982, the center was certified as an incorporated association and the name was changed to "Japan China Science, Technology and Culture Center." Professor Ishikawa became chairman in May 1988 replacing Ryozo Imano. Thus, Professor Ishikawa was always closely involved in technical exchange at the Culture center from April 1975 to April 1989 when he passed away with his always-warm heart, encouragement and advice.

We often visited Professor Ishikawa at his office as President at Musashi Institute of Technology to seek his help for better steering of the center. In spite of his busy schedule, he always welcomed us and gave us appropriate advices. Now this has become a precious memory. Even though the Professor always looked sharp when talking on quality control, he as a teacher was soft and his eyes reflected kindness. These are memories which I can never forget.

It would be easier to understand the great contribution made by Professor Kaoru Ishikawa for the development of quality control in China by special remarks made on the occasion by Yue Zhi-jian, President of China Quality Control Association, when he asked Dr. Ishikawa to assume the post of Honorary Advisor of the Chinese institution in August 1981. (See documents on the next page.)

(Executive Director, Japan China Science, Technology and Culture Center)

Historical Reference: Inaugural Address to the Honorary Advisor of the China Quality Control Association Yue Zhi-jian

Tue Zin-jian

First and foremost, I have wonderful news to tell you. Professor Kaoru Ishikawa, president of Musashi Institute of Technology, Japan and renowned scholar in Quality Control has kindly accepted our offer to become Honorary Advisor at China Quality Control Association. Professor Ishikawa first visited China in 1973 and brought his knowledge of Quality Control to us. He made two more visits to China in 1978 and 1979 respectively. During this course, Professor made many factory visits, reporting, lecturing and he made many valuable proposals on how to develop TQC in China to enhance quality. He personally visited and advised at the Beijing Engine Factory. Also,

his important papers and books have been translated in China over the years and read widely in this country. In fact, many QC experts in this country could obtain solutions from his books when they encountered challenges in their daily routine jobs.

Back in Japan, Professor Ishikawa was kind and warm to welcome our visiting missions, experts, academicians, engineers and he was always willing to share his valuable experiences with them. In a nutshell, Professor Ishikawa made a great contribution to dissemination of TQC in China while enhancing corporate management level.

Today Professor Ishikawa will be inducted as honorary advisor but he has been in that position already in actuality over the years. I would like to personally express my gratitude to Professor Ishikawa for promoting friendship between peoples of China and Japan.

Accordingly I, on behalf of China Quality Control Association, formally invite Professor Ishikawa to the position of our honorary advisor. At the same time, I wish long-lasting friendship between peoples of China and Japan. I also request the quality control experts, academicians, specialists and engineers of the two countries to closely cooperate in their further efforts towards the happiness of all mankind.

(President, China Quality Control Association)

Our Government Began to Emphasize TQC because of Prof. Ishikawa's Speech

Sha Yie

I visited Japan as a member of Quality Control Mission from the First Machinery Industry in May 1978 by invitation of Komtatsu Ltd. In Japan, I was able to meet Professor Ishikawa thanks to Mr. Ryouichi Kawai of Komatsu Ltd. and Mr. Ryoichi Kawai, its then-president (currently chairman). Mr. Kawai told us "Komatsu owes a lot to Prof. Ishikawa's support for today's progress. Professor is a lifesaver for Komatsu."

In that meeting, Professor Ishikawa listened to our explanation of Principles of Enterprise Reform announced at Anshan Steel with a lot of interest. In the following years, I had a chance to read a book presented by Komatsu Ltd. titled *DANKOTARU KETSUDAN* (Resolute Determination) and found a picture of Professor Ishikawa lecturing at Komatsu in this book (p. 187). The picture showed a blackboard behind him written with words like "Tri-party (management, engineers and craftsmen) Small Team"

and "Principles at Anshan Steel Mills." I realized that Professor Ishikawa paid enough attention to good experiences of different countries and I was deeply impressed with his profound knowledge.

In late March of 1979 Professor Ishikawa visited Beijing Engine Mfg. with president Kawai. The Professor went all around the shop floor and saw every working machinery including the melting furnace and even the warehouse. He then, gave us invaluable comments which were very helpful for our own improvement. Later he met with senior officials of the National Economic Planning Committee and he said "Even with your current machinery and manpower, you will be able to raise productivity two or three times higher than now as you implement TQC in a steady and solid way." This advice by Professor Ishikawa triggered more attention to TQC by our central government.

Professor Ishikawa, a friend of the people of China, unhappily passed away but we at Chinese industries will never forget him. Let us express our sincere condolences.

(Vice President, China Enterprises Managing Association; Vice President, China Association for Quality Control)

Unforgettable Drive with Prof. and Mrs. Kaoru Ishikawa

Ms. Ma Lin

Professor Ishikawa served as honorary adviser of 'China Quality Control Association' and he greatly contributed to China's promotion of TQC. This is something all of us as promoters of quality control in China will never forget. I personally owe him many things.

My first visit to Japan took place in September 1980 as a member of the first QC study mission. I was fortunate to benefit from his instructions and knowledge at that time. In 1986 the Chinese government sent me again to Japan and I spent two years studying Quality Control in the laboratory of Professor Hitoshi Kume at the University of Tokyo.

One day in autumn of 1987, when I was still at the University of Tokyo, I got an invitation from Professor Ishikawa for a drive to Mt. Fuji. I was extremely happy but at the same time a bit worried to share time with him as I knew he was very busy.

Mrs. Ishikawa drove very well and I had the opportunity to talk with her and the

Professor in relaxed surroundings.

I told him how I was studying at the University of Tokyo and he advised me "For your study of QC, you should visit many companies and see how Japanese Presidents are putting TQC into practice with your own eyes. QC means practice, not theory." I followed his instruction and diligently studied QC during those two years.

Whenever I look at the picture of three of us, Professor, his wife and me, taken at Mt. Fuji for our memory, I feel I can hear his words.

(Assistant Secretary General, China Quality Control Association)

(2) Korea

Dr. Kaoru Ishikawa who contributed to the Development of QC in Korea

Chang Se Yung

Believing that quality assurance was the base of quality control, Dr. Kaoru Ishikawa planted the seeds of process-centric and QC-centric doctrines not inspection-centric, to Korean enterprises. When it comes to his great contribution to the enhancement of quality in Korea, there is no room to argue.

His contribution in quality control in Korea can be summarized as follow:

- 1) Dr. Ishikawa carried out the following QC educational sessions.
- 1975

May 1	QC Special Lecture	at Seoul Trade Building
May 3	QC Special Lecture	at Pusan Blue Tower Grill
May 7	QC Special Lecture	at Seoul Chosun Hotel

- 1977

27 to 31 July

Special Seminar for Top Executives in Daegwallyeong

- Quality Control Function and Quality Assurance
- QC Administration
- Role of Top Management in promotion of QC

- 1980

10 to 14 August

Special Seminar for Top Executives at New Seoraksan Hotel

- Japanese Way of QC
- General Theory on QC
- Subcontracting Management
- QC Circle Activities
- New Product Development and QC
- Role of Top Management in Promotion of QC
- 1981

21 to 23 April at Dogo Hotel, South Chungcheong Province Same as above sessions including Japanese Way of QC

- 2) Dr. Ishikawa participated in the following events.
- 28 October 1975
 Lecturing at Special Seminar for Expatriate Top Executives (Big Hall, Trade Building)
- 29 October 1975 1st National QCC Competition
- 30 October 1975 1st National QC/Standardization Convention He observed, advised and guided.
- 22 to 24 November 1982 ICQC '82- Seoul at Lotte Hotel, Seoul special lecture at the conference: "Basic Principles of QCC activities and Future Agenda"

Dr. Ishikawa joined round-table talks on major economic newspapers such as Han Kyung and Maeil Business.

3) Dr. Kaoru Ishikawa in the eyes of Koreans

Defeated in the World War II, Japan started a study on how to promote QC and its ideal direction by a newly made QC study group within the Union of Japanese Scientists and Engineers in 1949. I understand that Dr. Ishikawa was a leading person in the group.

As a university professor, while he committed himself to the front line of industries by instructing statistical methods and QC methods, Dr. Ishikawa could experience the practical side of QC as a part of socio-industrial system and he led Japanese QC and QCC with Japan's identity as he could observe and analyze the difference between Japan and other countries in social and cultural contexts.

Dr. Ishikawa asserted that TQC means business management itself; he also stressed that the practice of QC will be successful without fail if the top management shows its leadership to involve all people in an organization including rank-and-file employees and middle management. He repeatedly emphasized the importance of education and training. He provided great support to invigorate QC in Korea. Professor Ishikawa often referred to QC as a thought revolution in business management and he called for a switchover of business thinking to all Korean top management officers.

In every lecture, Dr. Ishikawa reiterated both self-initiatives of QC Circle and the importance of humanity. He stressed the need of leadership by top management, control by middle-management and empowerment of staff for healthy promotion of the activities. He was truly a benefactor of Korean QC with his great contribution to Korean TQC and QCC as a practical campaign.

(Managing Director, Korean Standards Association)

(3) Thailand

Prof. Dr. Kaoru Ishikawa, Our Beloved Father

Klahan Voraputhaporn

It happened one day in the year 1976, the first introduction and first touch on QC Concept given by the late Prof. Dr. Kaoru Ishikawa. At that time, if I am not mistaken, Prof. Dr. Ishikawa was the leader of a Japanese delegation to attend an international meeting on standardization held in Bangkok. He was requested to give some advices to the TMDPC (Thailand Management Development and Productivity Center). The TPA (Technological Promotion Association (Thai-Japan)) heard his presence in Thailand, and by the arrangement and assistance of TMDPC, could organize a half-day seminar to introduce the QC Concept to Thai industry. Since it was a sudden and so new to the thinking of Thai people, this first ignition got fire only two years after when Prof. Dr. Noriaki Kano, his disciple had given two lecture courses; one aimed at middle managers and the other aimed at foremen.

By listening to his words in his lectures, reading his books and other literatures, I always hear that the "Quality" of anything cannot be assured or even possible unless we get everyone and all, from top down to the first line, who are involved in any kind of productive work in the organization, to be responsible for the quality of his/her and their

own work. The participation especially by the first line workers must be voluntary (which by using this word in English meaning, gives rise to wrong interpretation and confusion in QC promotion). He always emphasized that in free market and keen competition, the competitiveness can only be strengthened through voluntary participation of everyone of every echelon. I interpret this as "Control without Controlling anyone."

Prof. Dr. Ishikawa was never boring to return to the "Basics" whenever he felt necessary. By so doing, not only Thai people but also the people of other parts of the world were convinced to a certain high level of understanding and attentiveness.

We Asian people (as Prof. Dr. Ishikawa belongs to) do not consider him as benefactor of Japan but we admire and respect him as the "Father of QC." Because he always mentioned that QC Concept (specifically the QCCs) shall be the asset/ property of the world not only of Japan. We admire his plain and very humble attitude. At first, he spoke out many times that the QCCs could not be applied to any non-Kanji country like Thailand. Later on when he found out that the QCCs spread widely and quite successfully in those countries not using the Chinese characters of Kanji, he immediately and frankly accepted his perception fault. He did mention as a "must", the strong support and involvement of the top-most people of the organization in order to make QC promotional campaign successful.

Last but not least, we do know that through his long years of hard work and perseverance, he overcame a lot of hardship and disappointment. As I mentioned before, since he was democratic-minded, so simple, modest and with strong determination of his own beliefs that made him overcome hundreds of troubles and obstacles and bring the QC to the present status, that nowadays, we, Thai and Asian people enjoy and harvest the benefits both in material and non-material terms from the lasting his will: the QC activities restlessly and untiringly campaigned and promoted by our Prof. Dr. Kaoru Ishikawa, our "Father of QC" all the time.

This is not the end of the story but the beginning of prosperity and development in Asian countries by applying widely the true essence of the "Asset of the World: the QC concept and practices were character left us by our beloved father Prof. Dr. Kaoru Ishikawa. His life style and open-minded shall be fresh and live in our memory for ever.

(Vice Chairman, QCHQ of Thailand;

Former President, TMDPC

(Thailand Management Development and Productivity Center))

(4) Taiwan

My Teacher, Prof. Kaoru Ishikawa

C. S. Tsong

My thoughts for Professor Ishikawa surpasses just an admiration of a teacher. It is rather akin to worship of my parent. When I heard the sad news of his demise, I could not stop my tears from flowing. When I arrived in Japan, at his residence, Mrs. Ishikawa opened his casket and showed him to me. His face was full of mercy and peace, as if he was about to open his mouth to call me, I just recalled those early days when Professor Ishikawa taught me and I was overwhelmed with tears. My encounter with him was the biggest turning point in my life.

For my education in Japan, I chose textile engineering. As I witnessed the emergence of Japanese industries in the global market by the introduction of statistical quality control, I was stunned and shocked. Realizing QC is the only means to develop and promote a nation as well as its enterprises, I decided to explore the world of QC. My wish came true when I was permitted to enroll at the Ishikawa Laboratory at Graduate School of the University of Tokyo where I concentrated on the study of QC under the guidance of Professor Ishikawa himself. I was able to lay my foundation much deeper than usual all thanks to him.

In 1970, I founded Advanced Enterprises Managing and Development Center with Dr. Ishikawa's encouraging advice to exert my knowledge for the development of Taiwanese economy. With that I started my professional services related with QC. When I organized the first "National QC Circle Convention," Professor Ishikawa with five of my old friends at Ishikawa Lab came to Taiwan to join us. Since then, he came to Taiwan every year to deliver his lecture at CWQC seminars, in spite of his very busy schedule. It was customary for us to drink after a session until late hours of the night to hear his advice and he always came to the room with his dignified look in a very impressive manner. Two years ago, he looked a bit thin and his back seemed to be curved, and I found him coughing. But he was in high spirits as usual and he continued to inspire us with his active presence in the global scene.

During my business in QC at Taiwan, I faced a lot of hardship and setback. Each time, I could hold myself together, fueled by the daring spirit of Professor Ishikawa, my great professor. I am determined to dedicate myself wholeheartedly to building a better nation and enterprises by following through with my original intentions. I do believe that doing this would be the best way to offer my sincere respect to the great professor.

Last but not least, let me pray for him.

(President, Advanced Enterprise Managing and Development Center; Mr. Tsong studied at Ishikawa Lab. and graduated Master Course of the University of Tokyo)

Thinking of Dr. Kaoru Ishikawa

Q. Z. Tsong

In the morning of April 19, 1989, when I received a message from the Union of Japanese Scientists and Engineers (JUSE) that professor Kaoru Ishikawa passed away, I was stunned that Dr. Ishikawa, the founder of QC Circle and former professor at the University of Tokyo, had succumbed to sickness. I remember I could not accept the news for a while. Of course, I knew he was aging but I believed he could still be well and live longer as Japanese people's average life span is the longest one in the world. It is very sad to lose him and it is also a big loss for the practitioners of quality control all over the world.

I was introduced to Professor Ishikawa during my first visit to Japan in 1965 by Mr. Shin Miura. At that time, he was a professor at the University of Tokyo and the most authoritative scholar in promotion of quality control at JUSE. I arrived in Tokyo at the end of October in this year and the next month of November was for the Quality Month. Courtesy Dr. Ishikawa, I was invited to various events in that month such as Deming Prize awarding, QC-related paper presentation, QC Circle presentation as well as visits to good QC practice factories among many others to enable me to comprehend the progress of QC in Japan. Furthermore, I could meet Dr. W. Edwards Deming, the world famous personality, with the help of Professor Ishikawa. From this acquaintance, I could request Dr. Deming to visit Taiwan as many as three times during the 1970s for his lecturing on TQC and quality management. In the meantime, during my first encounter with QC Circle, I realized how effective this approach would be to improve quality levels at work sites. When I returned to Taiwan in 1966, I started my own counseling for QC Circle at Shunfeng, a manufacturer of electric fans in Tamsui.

In the 1960s when I was working at China Productivity Center, I helped all visiting QC scholars and experts as an interpreter. Among them, Dr. Kaoru Ishikawa was the most impressive. His lectures were delivered with all comprehensive expressions, not difficult theories. Professor Ishikawa was very kind and open hearted person and he loved his drinks. We often chatted over drinks after duty hours; he kept drinking just like drinking water but he never got drunk. In spite of this he as lecturer on the next day

was full of energy, which was very impressive.

Dr. Kaoru Ishikawa, not just as the founder of QC Circle, made a tremendous contribution to QC in Japan as well as QC promotion in many countries of the world. In his younger years, Dr. Ishikawa focused on the study of sampling theory including the nested sampling method. Later, he energetically advocated QC Circle activity and pursued the idea of work sites acquiring the QC approach. He spread the idea that quality should be built in the process and that self-management should be implemented by every frontline worker. I believe that his idea was one of the factors that have made Japanese workers truly world-class.

Dr. Ishikawa was born in a genteel family: his father Ichiro was the first chairman of KEIDANREN (Japan Federation of Economic Organizations) and also chairman of Union of Japanese Scientists and Engineers (JUSE); all of his brothers studied at the University of Tokyo. I remember the times when I was invited to the meal by his brother Shichiro, and we talked on many topics concerning quality control. I heard he was appointed as a board member of Honshu Paper later. Professor Ishikawa was born in such an excellent family.

In addition to his promotion of QC Circle that proved its effectiveness in the world, Dr. Kaoru Ishikawa, with Drs. Shigeru Mizuno and Tetsuichi Asaka, delivered special lecture series on quality control for top management officers of various corporations at first-class hotels in Karuizawa or Hakone resorts as authoritative experts. Many top officers from blue-chip corporations could receive precise QC knowledge: this education enabled those corporations to promote their QC activities smoothly. Dr. Ishikawa said, "QC starts with education and ends with education." That represents his wisdom and that is right indeed: education is a foundation of all. His views and excellent ideas were clearly remarkable than those of ordinary people.

Some years ago, Dr. Ishikawa retired from the University of Tokyo and assumed presidency at Musashi Institute of Technology. He was actively involved in promoting QC Not any stagnant, he travelled to many countries for his lecturing and counseling. I had to admire his energy. He was an elder scholar and a leader of quality control. He was respected globally in quality control as one of a few international leaders in QC as exemplified by his appointment to the post of honorary chairman at the Asia-Pacific Quality Organization as well as honorable awarding by the American Society for Quality Control, among many.

The Union of Japanese Scientists and Engineers grew to become not only the largest QC promotional institute but also an authoritative organization to support learning and promotion of QC in the world under the decades-long leadership of Dr.

Kaoru Ishikawa.

It is extremely regrettable that Dr. Ishikawa passed away suddenly while he had been expected to make more contribution to Japanese and world promotion of QC with his fame and commitment. I believe JUSE will inherit his legacy to model and keep on developing. When someone succeeds the path that Dr. Ishikawa paved, as a Chinese proverb says "the value of his life can be judged by what he did for the world, even though no one can escape from our destiny to ruin someday," Dr. Ishikawa's spirit in heaven must be feeling happy.

In recent years, I had little chance to meet with Dr. Ishikawa but I am writing this essay to express my nostalgia and mourning for him while recalling our past memories.

(Managing Director, Chinese Society for Quality Control)

12.2 Prof. Ishikawa and the USA

Dr. Kaoru Ishikawa as a World Citizen and an Effective Leader in the Field of Quality Control

Charles A. Bicking

Dr. Kaoru Ishikawa was truly a citizen of the world! In the mind of this writer, he was pre-eminent in the field of quality control. No European nor American is his peer in providing guidelines for the control of quality. He was of great stature, so that managers listened to him. He was aware of the difficulties in implementing control on the production line and was able to help foremen and workers. One of his remarkable achievements was his influence on the establishment of Quality Control Circle. He knew, in his own words, that "techniques must be practiced on the job."

His *Guide to Quality Control*, while not a handbook, gives more directly useable advice in 226 pages than does one well known "Handbook" in five times as many pages. So much for the effectiveness of many of the other promoters of quality control who are word-merchants rather than technical experts!

He was a very perceptive man and recognized and dealt with short-comings he saw in industrial organizations and in National and International Societies of quality control professionals. It was the writer's privilege to have been close to him in numerous exchanges of visits in his country and mine, and while attending professional conferences and meetings around the world. Having discussed with him the strengths and weaknesses of groups we worked with, it is certain that he, like the writer, sometimes had reservations about the course of affairs; but he, nonetheless, worked diligently to upgrade his profession! He knew when a person or a group was a phony, which is very remarkable evidence that he participated in and contributed to growth of a world-culture that disregards local customs and National boundaries.

The writer and his late wife, who died a little over a year after the death of Dr. Ishikawa, were entertained by him and his wife in their home, and he, in turn, was entertained by us. We experienced a genuine personal friendship, as his sensitivity to others that has rarely been exhibited among co-workers or friends in the writer's own country: One morning, in Tokyo, he picked us up at our hotel and apologized for having had too much *Sake* the previous evening. Of course, we probably all had too much *Sake* at the time!

Recently a count was made of the number of pages in each of two National magazines on which a diagram, data analysis, or control chart appeared, come to the number of pages of printed text. In *Quality Progress* (Milwaukee), every sixth page contained analytical examples or charts. In *Hinshitsu Kanri* (Statistical Quality Control) (Tokyo), every other page contained illustrations of one analytical tool or method. This is a large disparity. One of the reasons that Japan has succeeded so well in producing quality products is that, while the U.S. reader needs to wade through six pages to find an example of a technique he can apply on the job, the Japanese reader needs only to turn over one leaf! In a similar vein, Dr. Ishikawa brought to his country and to the world, specific ways of solving problems and did so much more effectively than has been done by many of the widely-known gurus of quality control.

Dr. Ishikawa stands head and shoulders above them all!

(Consultant; Retired from the Carborundum)

Dr. Kaoru Ishikawa and the Malcolm Baldrige National Quality Award

John J. Hudiburg

One of the most successful things that has happened to improve management science in the United States was the creation of the Malcolm Baldrige National Quality Award (MBNQA).

From its inception in 1987 it has attracted a large amount of interest throughout

corporate America. Moreover that interest has continued to grow rapidly each year. So much so that in 1991 over 200,000 requests were received by the National Institute of Science and Technology (NIST) for the MBNQA criteria. Most of the companies making these requests do not plan to actually apply for the prize any time soon. However, from the beginning one of the principal purposes of the prize has been to increase awareness of TQM and the MBNQA has done this admirably.

Also during the four years since the first prize was awarded the Level of TQM of both applicants and the winners has improved significantly. It is no exaggeration to say that thousands of companies have started their journey to TQM because of the MBNQA.

Of course, all of this did not just happen. Someone had to make it happen. After the enabling legislation had been passed at least a hundred American quality professionals as well as the people at NIST pitched in and put all of the necessary processes together. Moreover this had to be done in a very short period of time. The enabling legislation for the MBNQA was passed by the US congress in May of 1987. At that time President Reagan announced that he wanted to make the first presentations at the end of 1988 just before he left office. Although the time was short, the job seems to have been done well. The MBNQA has met or exceeded all of its original expectations. Its success is being recognized more and more and the MBNQA has already been copied by at least six other countries and a considerable number of others are planning to do something similar.

It goes without saying that there were not always so many people involved in the effort. In the very beginning there were only about ten people that were involved in the creation of a US quality award. Dr. Kaoru Ishikawa was one of them. Here is what happened.

In 1985, I was Chairman and CEO of the Florida Power and Light Company (FPL). At that time we were very serious about installing a Japanese style TQC management system at FPL. As a result of this effort I had visited Japan on a number of occasions. While there I had learned something about The Deming Prize and its contribution to Japanese TQC.

It seemed to me that something similar to the Deming Prize in the US might be a positive step. While I was wondering how this idea could be implemented, I talked to various people in Washington D.C. It seemed to us that to provide a US Quality Prize with the maximum prestige, that the President of the United States should make the presentations. That seemed to mean that we would need for an Act of Congress to be passed so as to formally establish the prize.

One big problem with this approach was that no one in Congress knew anything about TQC or the Japanese Deming Prize. So the question was how to first inform them and then convince them to take the necessary action to create a quality prize.

While I was in Washington working on this, I learned that a very influential delegation from Congress was planning to visit Japan in the first week of January 1986.

This gave me the opportunity to suggest to them that while in Japan they spend an afternoon learning about Japanese quality management and the Deming Prize. To this suggestion they agreed and the meeting was set up to take place in Tokyo on the 5th of January. I received the task of arranging the meeting. The US embassy suggested the Okura Hotel as the meeting place since it was so convenient and there was no problem with the other arrangements except for one big thing. We could not find the right person to make the presentation. It seemed that everyone we asked already had made holiday plane. Things began to get a little tense. Then we found the answer. We asked Dr. Noriaki Kano to help us and he said he would. He said that he would see if he could get Dr. Ishikawa to speak to the Congressional delegates. Well, of course, this would be perfect and on our own I don't know how we could ever have gotten someone of Dr. Ishikawa's stature. To our great relief Dr. Ishikawa agreed to alter his plans and come in on his holiday to make the presentation. I had never met Dr. Ishikawa prior to that time but of course I knew of his reputation and the congressional delegation was also very pleased when they heard who would be speaking to them. Things were definitely looking up.

Dr. Ishikawa arrived early on the 5th and made sure everything was in proper order. He seemed satisfied and shortly thereafter the meeting got off to a good start. Dr. Ishikawa spent about two hours talking about TQC and the Deming Prize. Then he spent about another hour answering questions, All in all it went well, especially the Q and A session which was very useful. He not only was informative on what and how but also went into the why things were done. Afterward as I talked to the delegates that evening it was clear that they had learned a great deal. I, too, had a much clearer idea of what should be done to establish a US quality prize.

When we returned to Washington the Congressional staff of the committee of Space Science & Technology went to work drafting the necessary bill and arranging for hearings to be scheduled etc. The entire legislative process took a little over a year to complete but it had been well launched by the good efforts of Dr. Ishikawa and Congress when we were in Tokyo. The rest is history.

(Former Chairman & CEO, Florida Power & Light; Chair-man, the Foundation MBNQA 1989)

His Strong Insistence on the Use of Practical Real-Life Examples

Murray Liebman

Dr. Ishikawa touched my life as a friend and a colleague. It was an uplifting experience to be involved with a man so dedicated to helping others by sharing his experience and knowledge in quality control.

He had the gift of all great teachers to open the mind of the student to new ways of thinking. Dr. Ishikawa took great care to explain new ideas with examples that made them easy to understand and apply.

Dr. Ishikawa provided focus to the international academy for quality. He emphasized that our role was to teach the principles and ideas of quality control throughout the world.

What I remember most was his insistence on the use of practical real-life examples so the student could understand and relate the ideas and techniques of Quality Control to his everyday on-job requirements. He used many charts and graphs with detailed explanations as illustrated in *Guide to Quality Control* by Dr. Ishikawa. I have use this book for many courses and am constantly impressed how well it is received by both management and technical personnel.

I had the good fortune and opportunity to have discussions with Dr. Ishikawa on a variety of Quality Control related subjects. Because of these discussions I modified many of my presentations by illustrating Quality Control ideas and techniques with many hands-on practical examples that directly related to my audience.

I would be remiss if I did not mention the personal and delightful times my wife and I spent not only with Dr. Ishikawa but also with his charming wife, Keiko. Language was never a barrier. My wife and Keiko hugged each other during our first social get-together and a bond of friendship was forged.

He is missed as a colleague and a friend. He will be remembered for his dedication to teaching and as a reminder to each of us of our obligation to play our part in improving the Quality of Products and Services with the ultimate objective of improving the Quality of life. (Former President, IAQ)

Dr. Kaoru Ishikawa's Impact on Quality Control Practices in the United States

Wayne S. Rieker

Dr. Kaoru Ishikawa's teachings have had a profound effect on the working lives of the people in America and the way in which the Quality Control profession is practiced, but I'm sure most people do not realize this. I was fortunate to have been one of the main conduits for putting Dr. Ishikawa's philosophy into practice here in America and for that matter in a number of other countries in Europe, Australia, Southeast Asia and South America. Today it is well accepted that the most effective way to manage institutions is to involve the workforce in solving the everyday problems of the workplace by training them in problem solving techniques and using the normal workforce groups for investigations as to the causes and searching for solutions. These were the concepts of Dr. Ishikawa which he, together with the Japanese Union of Scientists and Engineers (JUSE), promoted by starting the Quality Control Circle movement in Japan. Although only a few hundred thousand people in the U.S. practice Quality Control Circle, millions practice, such methods as Employee Involvement, Teams, Worker, Participation, Self-managed Work Groups, etc. These practices are an outgrowth of the Quality Circle movement (called that in the U.S.), which had its beginnings in the US when in 1974 I as the Director of Manufacturing for the Missiles and Systems Division of Lockheed Missiles and Space Company started the first Quality Control Circle program. Dr. Ishikawa and Junji Noguchi of JUSE were very helpful in this effort.

My association with Dr. Ishikawa began to 1973 when I led a study group from Lockheed to Japan to investigate the practice of Quality Control Circle and look into the possibility of starting such a program at Lockheed. Dr. Ishikawa was gracious enough to share with us what made QC Circle successful and I was impressed that such a famous man would take time out of his busy schedule to be with us. I clearly remember that on that first evening, after a day of presentations, we were in a restaurant atop one of Tokyo's skyscrapers, he was trying to explain the concept of QC Circle so he took out his notepad and wrote down these principles.

- 1. JISHU
 - spontaneously
 - voluntarily
 - autonomous

- 2. Self-development
- 3. Mutual-development
 - frog in the well
- 4. All participation
 - tool box meeting
 - QC Circle meetings
 - 3 shifts

I have kept that little slip of paper with his handwriting ever since. A copy is included. JUSE and Dr. Ishikawa were very kind to us and provided us with a set of their training materials in .Japanese, with which we were able to come home, translate them into English and begin our program. In 1976 Dr. Ishikawa came to the U.S. and visited us to see how we were doing. 1 was able to introduce him to some of the Lockheed hierarchy and he made quite an impression. I was able also to have him visit my home and we became better acquainted.

In 1977 retired from Lockheed and started a consulting business helping other companies to implement QC Circle programs. Dr. Ishikawa counseled me in some aspects of getting started. Each year thereafter we would see each other at various international conferences and I was honored on several occasions to participate as a co-keynote speaker with this famous man. It was interesting to me to see what a powerful speaker and teacher he was when he was able to make his presentation in Japanese.

When we first began to encourage American management to try Quality Control Circle they were very hesitant. Generally they believed that the Japanese worker was different and more responsive to management's desires. However as the early practitioners were successful, more and more companies were anxious to begin a program. At one point, in the early 1980's a survey was taken and it showed that the process had grown faster than in Japan. In the succeeding 10 years we were able to reach more than half of the Fortune 500 companies and assist them in starting Quality Circle programs. We translated the training materials into French, Swedish, Spanish, Italian, Portuguese, and Dutch, and established licensees in many countries to spread the word. I will always be grateful for the effect Dr. Ishikawa had on my life. I became enamored of the Japanese people, studied the Japanese language, hosted a Japanese exchange student who became like a son to us, made many good friends like Dr. Noriaki Kano, Junji Noguchi and Masumasa Imaizumi.

Dr. Kaoru Ishikawa was truly one of the great leaders of the Quality Assurance profession and had a significant impact on improving the quality of the products and services of the world.

Even more important to him I am sure is the effect he had in improving worker's knowledge, and building on the feeling of pride in their work.

(Consultant; Former Director of Manufacturing, Lockheed; Founder of QC Circle in US)

12.3 Prof. Ishikawa and Europe

(1) Czechoslovakia

The Impact of Dr. Kaoru Ishikawa on TQC in Czechoslovakia[†]

Ms. Agnes H. Zaludova

It is indeed honor for me to speak about Dr. Kaoru Ishikawa, for his contribution to the social progress at global level and recognized in the Central and East Europe as well.

The first Czech-Slovakians who happened to know Dr. Ishikawa's personality were a 17-member delegation to the 10th EOQC Convention held at Stockholm in 1966. On that convention, he played three different roles: first, as very experienced scholar in statistical application at the problem of bulk materials; second, as the advocate of QC Circle in the context of Japanese Company-wide Quality Control; and, third, as the representative from JUSE in the six-man committee to launch a new forum to be known as International Academy for Quality (IAQ).

Three years later, in October 1964, I was in Tokyo and attending at that memorable first International Conference on Quality Control (ICQC) and subsequent factory visit sessions. I was able to learn extensively, with Dr. F. Egermayer, what was going on at Japan's quality revolution, with a focus on Dr. Ishikawa's achievement at JUSE. He presented two keynote papers: one was dealing with the ten QC principles of vendee-vendor relations and the other was to deal with comprehensive QC training organized by JUSE. Both papers were very comprehensive and suggestive for Czech QC experts and practitioners as they told us the various issues of company-wide quality control and features of the Japanese system such as involvement at management-level,

[†] This article has been translated from the Japanese version back into English, since the original one written in English is missing.

comprehensive participation of different echelons of employees and training at all levels in an organization.

A few years after that, in June 1973, Czechoslovak Scientific and Technical Society (CVTS) was able to welcome the sixth QC study mission with Dr. Ishikawa as the leader in Prague. This mission had two important implications for us.

First, Dr. Ishikawa accepted our request to deliver his special lecture on the development of QC in Japan, post-World War II. Its manuscript was translated into Czech language and appeared as an article on Technika Praca, a journal of CVTS. This article became a standard textbook for training. However, much larger effect was brought by presentations by three QC Circle leaders from Japan. At a seminar during their visit, three circle leaders, Messrs. Fujiwara (Honda Motor), Murakami (Sanwa Seiki) and Naruse (Toyota Motor Corporation) made their cases presented at the venue. Czech audience were surprised as they, after a brief introduction in Japanese, made their presentations in Czech language (!) with audio-visual aid that they had prepared in Tokyo by prerecording in our language. Their presentations of cases, or QC story, were identical in composition and very easily comprehensible and using easy statistical methods in various purposes: to improve and maintain processes, to collect and analyze data, to explore causes, and to determine effective solutions to eliminate problem-causing factors. In a nutshell, their three case studies covered fundamental scientific approaches in problem solving, prevention of recurrence of defects, as well as realization of changes or modifications at controlled state. Their reports, too, were translated and published as textbook at many training courses organized by CSVTS during the 1970s and 1980s. These methodologies, seven simple statistical tools and the use of graphics were all developed by Dr. Ishikawa.

Many of these ideas and methodologies might have been advocated by those experts in TQC/TQM such as Drs. W. E. Deming, J. M. Juran, A. V. Feigenbaum and others. However, I am convinced that more effective and wider promotion of those methodologies in Japanese industries were made possible as they placed more emphasis on human relations, while they also pursued tenacity of purpose, advancement of technology, the use of past lessons, effective organizational capability and above all by excellent quality of Dr. Ishikawa himself. Numerous cases of application of his approach across many countries in the world tell of its universality.

His book in 1985, *What is Total Quality Control? The Japanese Way* was an English publication to acknowledge Dr. Ishikawa's critical role to lead Japanese economy to the current success. Very regrettably, we got involved in a copyright problem even though we had Dr. Ishikawa's letter of consent to translate to Czech

language. Hopefully we wish to solve this problem as early as possible. Since, our Czech Republic is undergoing a big change in everything including social, political and economic systems, this book will have immeasurable value for our business executives.

I was fortunate to see Dr. Ishikawa and his wife regularly at expert conferences and IAQ meetings since 1972. Each time, I noticed Dr. Ishikawa showed his interest in everything, regardless of category and I sincerely admired his wisdom in business, his sense of humor, his ability to comprehend, and particularly, his talent in photography. Unexpected news of his demise gave me a shock and many of his associates and supporters in the Czech Republic were shocked too.

(Honorable Chairman of Czech Society for Quality and a member of IAQ)

(2) Finland

Learning Quality Guided by Professor Ishikawa †

Anders Diehl

It was in May 1979 when Dr. Kaoru Ishikawa lectured for his first Finnish audience at a time when representatives of top Finnish companies visited Japan to know why Japanese industries were such a success. The group included a chairman of Finnish Industrial Association and top management officers of blue chip corporations.

Though reluctant at first, as they thought the issues related with quality control was something experts should tackle, they accepted my proposal to get lectured on TQC at JUSE. When Dr. Ishikawa started his presentation in little broken English, I saw a problem had occurred. The visitors were exhausted by a long journey and hard schedule. I noticed that they were trying hard to catch what Dr. Ishikawa was speaking about. I felt extremely anxious to see them as I knew that these high ranking officers needed to follow the lecture first in order to see a progress of TQC in Finland. However, Dr. Ishikawa succeeded in capturing their attention and thanks to his enthusiasm and robust experiences, all of them were able to understand his message. They left JUSE with a feeling of joy imagining the fabulous potential of TQC.

After this, these leaders send several batches of group from Finnish industries to Japan in order to learn TQC in Japan. The first batch was sent to Japan in the same year of the original high profile mission. In the early 1980s, Dr. Ishikawa's excellent lectures attracted many groups from abroad and many of them were from Finland. Americans

[†] This article has been translated from the Japanese version back into English, since the original one written in English is missing.

and other nationals rushed to Tokyo after us.

Dr. Ishikawa visited Finland for lectures in 1980. It was rather hard work for us to gather an audience who deserved the lectures, even though we knew he did a splendid speech in Japan. Consequently we had too many experts but few business people for the session. His lecture was very clear and easy to follow but not too many people were present at the venue. However, we could launch TQC in Finland based on the hands-on experience of those study groups that visited Japan to listen to precious experiences of Dr. Ishikawa and other experts as well as Dr. Ishikawa's personal visit to Finland. Without the presence of Dr. Ishikawa who connected directly with our audience, it would have been impossible to get started on TQC. We are grateful for Dr. Ishikawa for his personal guidance.

I was posted in Tokyo from 1977 to 1984. My most critical task was to assist those Finnish companies and organizations to learn Japanese TQC. The most critical point in those services, and still valid today, was to understand why it was successfully introduced in Japan whereas other countries including Finland experienced difficulty. Professor Ishikawa often referred to cultural differences between occidental and oriental countries from the viewpoint of influence to the implementation of TQC. In a nutshell, Dr. Ishikawa told us that Japan has more cultural factors that facilitate TQC than western countries have. On the other hand, many experts assert that TQC is a peculiar business philosophy in Japan.

I myself do not believe the philosophy that TQC can be influenced widely by cultural or historical background. Rather, I am convinced that a handful of persons like Dr. Ishikawa who were enthusiastic and patient are much more important than historical background.

I always wonder what if Finland had its own personality, as same as Dr. Ishikawa, with his eagerness and intellect, and if he had contributed to the promotion of QC for four decades, then, how much greater heights would Finnish TQC could reach?

(Chairman, Finnish Quality Association and former science and technology attaché at Finnish Embassy, Tokyo)

(3) France

How the European Management Practices Have Been Changing under the Influence of Dr. Kaoru Ishikawa[†]

Jean-Marie Gogue

Introduction

Millions of European people have heard of Dr. Kaoru Ishikawa as the father of the QC Circle, a practice that has been growing very fast since 1980 in Western Europe, especially in France and Great Britain. Moreover, many leaders of European companies who have a competitive position in international business think that the messages of Dr. Kaoru Ishikawa has been a determining factor in the improvement of their management practices for the 80s.

It is worthwhile to notice that Dr. Ishikawa's ideas are well known in the European top management circles, because they are assumed to affect all the management system, especially motivation, communication and internal relationship. On the contrary, these circles ignore the ideas of other QC worldwide leaders because they are assumed to affect just the QC Department. Unfortunately, it has been for a long time a tradition in Europe that QC is mainly the job of the QC Department.

Historical data

Before World War II, some applications of QC were made in Europe, especially under the leadership of Dr. Karl Pearson in Great Britain. After WWII, European industry had completely ignored this concept for a long time. The first QC National Organizations were founded in 1957, in France, Germany, Great Britain, Italy and Netherlands. These five countries jointly created the European Organization for duality Control the same year. During the first twenty years, this organization grew slowly and extended over other countries. In 1977, the membership was less than 2,500 people in Europe, 300 in France, in most countries, some QC training programs were offered to industry by the national organization, but the audience was small and limited to QC engineers. In Paris for example, during 23 years, 8,200 people attended 295 QC seminars of 1, 2, or 3 weeks. This figure represents the essential of the QC training in

[†] This article has been translated from the Japanese version back into English, since the original one written in English is missing.

France.

In Europe, up to 1980, top management did not take much interest in the job of the QC department, with the exception of the ITT subsidiary companies who benefited before WWII from the influence of the Bell Telephone laboratories.

Debut of Dr. Ishikawa philosophy in Europe *

European industry began to be interested in Japanese QC methods during the 70's when soma chief executives studied from the lectures that Dr. Ishikawa and other JUSE teachers made during the EOQC annual conferences. That is the way the first European QC Circle was born in 1973 at Saunier Dubal, a French manufacturer of electrical motors. Newspapers reported this achievement and many chief executives understood that the Japanese way for QC, according to Dr. Ishikawa, who named it CWQC, was not just a set of techniques for their QC engineers, but a way to solve their own management problems. The author, who was a QC manager in an ITT subsidiary company and a teacher in a university, can testify to that some French professors of traditional management worried about this innovation and claimed that the Ishikawa philosophy was "imperialist." But as Dr. Ishikawa himself used to say—"Who will bell the cat?*"—and French chief executives began to visit Japan in order to explore this new world where the companies are more competitive by making everybody happier.

The second surge*

In April 1980, the English version of *QC Circle Koryo* was published. In the preface, Dr. Ishikawa wished that Western companies adopt these methods and wrote: "I believe now that the nature of men is the same, wherever they are." This publication was the starting point of a fantastic growth of the QC Circle in Europe. Nevertheless, many chief executives were still thinking that QC Circle is just a motivation means. Giving lectures in Europe, Dr. Ishikawa constantly explained that QC Circle is not the whole TIC system, but that on the other hand TQC cannot be effective without QC Circle. He gave four one-day seminars in Paris, in 1979, 1983, 1984, 1985, with an audience of 400 to 700 people. In 1985, the book where he explains his philosophy: *What is Total Quality Control? The Japanese Way* was published in English and in French, with a tremendous success.

Dr. Ishikawa succeeded in making European top management think that QC is their job, and supplied them with practical methods for achieving this job. So he helped us to solve a basic problem due to a poor understanding of the management responsibilities. Thanks to him, we are re-defining our management principles, but it will be a long way.

Moreover, he let some of us understand that cooperation between companies and between nations is a practical attitude that can lead everybody to win.

Dr. Ishikawa's personality

During the several meetings I had with Dr. Ishikawa along the years, I particularly appreciated his kindness and his patience. Although he was the leader of a tremendous thought revolution in management in his country, he never tried to impose on his foreign colleagues his own point of view about practical methods. But he was definite about the principles that seemed to him independent of the national culture. Let me make a remark about his sense of communicability. In International meetings, he used to speak English, and the communication between him and me suffered from a double translation. But in French meetings, he used to speak Japanese with a simultaneous translation by good professional translators. In such circumstances, I particularly appreciated his wonderful talent of speaker and his outstanding ability to convince.

> (President, French Deming Association; Former President, the French Association for Quality Control; Emeritus Member, IAQ)

* This part is gabled so that it is retranslated from Japanese version to English.

(4) Sweden

To the Memory of Dr. Kaoru Ishikawa

Lennart Sandholm

Dr. Kaoru Ishikawa visited Sweden several times. The visit, that became the last one, was in 1986. He then conducted, together with his student and successor Dr. Noriaki Kano, a training course on Total Quality Control. The course was very well received. The course participants were enthusiastic.

At this visit to Sweden, a journalist from a major Swedish newspaper interviewed Dr. Ishikawa. The interview was given a significant space in the business section of the paper and attracted a considerable attention. The title of the interview was "*Han varnar för sina egna kvalitet scirklar*," in English "He warns about his own quality circles."

In preparing for this memorial item, I read the interview once more. It struck me how much better off, in quality, and consequently also in market strength, many Swedish companies would have been if they really had implemented Dr. Ishikawa's philosophy and advice.

Dr. Ishikawa clearly saw the situation behind what seemed to be seen. He was very successful in explaining various conditions and factors leading to a certain result. In this search for the truth, he had the ambition of a genuine scientist.

In the interview referred to above, this ambition is reflected in his criticism of the great interest for, and use of, QC Circle in Western companies that took place early in the 1980's. Dr. Ishikawa stressed that quality problems could not be solved through QC Circle activities alone. Instead it is necessary to have a company-wide approach to quality involving all functions and all levels. According to Dr. Ishikawa this requires a true "hands on" leadership given by top management.

At that time top managers in the West did not realize their own responsibility for quality development and that this responsibility was the most critical issue in order to achieve considerable results. Gradually in the following years we can see a change in attitudes of top managers, even if many of them still devote themselves mostly to fads when it comes to quality. In more and more companies, however, Dr. Ishikawa's ideas are being implemented with excellent results.

Dr. Ishikawa will go down in international quality history as the father of QC Circle. He developed this concept into a useful tool for quality improvement in Japan. His integrity, however, led him to not being late in criticizing QC Circle as they were used in the West two decades ago, as the only approach to quality improvement.

Another area where Dr. Ishikawa made a significant contribution was in the field of education and training. It is well known that numerous Japanese managers acquired a sound knowledge of quality management, as well as positive attitudes towards quality, as result of Dr. Ishikawa's efforts in the field of quality education and training. These efforts have also resulted in a cadre of highly professional and dedicated Japanese experts, who guarantee a continuation of Dr. Ishikawa's work.

In my lecturing around the world, I use to include Japan as an example of what can be achieved. Japanese development from poor quality to global leadership in quality always attracts the attention of seminar participants, students, etc. The reason why I include this is that we non-Japanese can learn a lot from Japan. What should we do in order to improve the quality of our products and, as a consequence, our prosperity? Here I always refer to Dr. Ishikawa. His opinion about the significant ingredients of quality work in Japan forms the basis of fruitful discussions. The same positive response is given by university students in Stockholm, by middle managers in Beijing, by engineers in Buenos Aires, by supervisors in Johannesburg or by industrial leaders in Sidney.

For 20 years I had the privilege of knowing Dr. Ishikawa very well. The first time I

became acquainted with him was at the annual conference organized by the European Organization for Quality in Stockholm 1966. The organizing committee managed, on the spot, to organize an extra session on the Japanese quality development with highly appreciated contributions from Dr. Ishikawa and Dr. J. M. Juran. In retrospect this became an historic session - the first time the QC Circle movement was presented to an audience outside Japan.

Since 1966 I had the pleasure of meeting Dr. Ishikawa several times, mostly at international conferences and meetings of the International Academy for Quality. Talks with him were always very stimulating. To me they were a source of profound professional development. His dedication to quality, combined with his intellectual and professional greatness impressed me.

We will always remember Dr. Ishikawa with deep gratitude.

(President, Bjorkllund & Sandholm AB; Adjunct Professor, the Royal Institute of Technology; Former President, Swedish Society for Quality Control; Member, IAQ)

(5) Switzerland

The European Quality Movement and Dr. K. Ishikawa

H. D. Seghezzi

Since over 10 years the development of Quality Management in West-European industrial companies is in full swing. Typical for the activities are the TQC or TQM movements within numerous European companies or the improvements in quality systems, which are mostly based on the widely accepted ISO 9000 standards. An increasing number of companies in Europe is aiming for a quality systems certificate, issued by an independent third party, like the SQS^{*} in Switzerland, the BSI^{**} in the UK or AFAQ^{***} in France.

But high quality of goods and services is not a new attribute in Europe. There is a long tradition already rooted in the rules of medieval quilts. German machinery, Swedish steel, Italian fashion, French perfume and Swiss chocolate are only a few examples for the worldwide reputation of high quality goods. This proves that Europe

^{*} SQS: Schweizerische Vereinigung für Qualitatssicherungs-Zertifikate (Swiss Association for Quality Assurance and Certificates)

^{**} BSI: British Stnadards Institution

^{***} AFAQ: Association Francaise Assurance Qualite (French Association for Quality Assurance)

has not lost its ability of producing high quality products and services.

Traditionally, high quality in Europe is based on the strength of the educational system, the technical skills, the quality-oriented attitude, the well-equipped industries and the high standard of living. All these factors operate towards high quality or are the way of achieving high quality goals ^[1]. Through their intensive striving for quality, entrepreneurs and workers won worldwide respect for labels such as "Made in Germany" or "Swiss made." Our strategy in Europe was one-dimensional prioritizing high quality resulting in higher costs and lower productivity.

This strategy lost its attractiveness when Japanese companies demonstrated that quality and productivity can be combined and the conventional trade-off between both is no longer necessary. Parallel to the practical examples evolved the development of the theory. Already in 1966, Dr. M. Kogure presented a paper at the 10th EOQC-Conference in Stockholm^[2], in which he discussed the problem of simultaneously managing quality, quantity and costs. At the same event I had my first encounter with Dr. K. Ishikawa, who spoke on the topic of "Some Experimental Methods for Bulk Material Sampling^[3]." Four years earlier, in 1962, he had already introduced the QC Circle concept in Japan. In those days, European experts still followed the one-dimensional strategy and did not take much notice of the QC Circle concept. Nowadays, the idea of permanent improvement programs and the involvement of the whole work force is widely accepted, also in European industries.

During his work for ISO, Dr. Ishikawa visited Europe frequently. At two of these occasions, we organized conferences for top and line managers in Zurich in 1982 and in Milan in 1983, where we expanded the earlier field of Quality Control and Quality Assurance into the broader scope of Quality Management. Dr. K. Ishikawa held remarkable speeches^[4] explaining the importance of process control, quality control in product development, companywide quality control and the importance of Japanese culture and ethics for TQC in Japan.

The discussions with Dr. K. Ishikawa at these events strongly influenced the further development of the European Organization for Quality Control (EOQC). Under my chairmanship a small group of active and former Presidents and Vice-Presidents started in 1984 to prepare the EOQC for the nineties and planned a real turnaround. The ideas of the most advanced leaders like Dr. K. Ishikawa and Dr. J. Juran were the benchmarks for our planning. Our work resulted in a new strategy for EOQC, which was issued during the annual conference in Munich in 1987. At the same time, the name was changed into "European Organization for Quality" by deleting the word "Control," which in its meaning was too close to inspection and not near enough to management

^[5].The new strategy determined three main directions of activities:

- 1. EOQ wished to address a broader target group, namely all managers, state officials and politicians and not only "quality specialists."
- 2. High emphasis was given to the development and the dissemination of methods, mainly by communication in conferences and seminars.
- 3. Extension was decided into new industries and in the service industries.

Addressing top and line managers proved to be much more difficult in Europe than in Japan, but their commitment was crucial for their success, as Dr. K. Ishikawa has pointed out often enough. For EOQ as a home base for "quality specialists," it became very clear that a successful approach was probable only in full cooperation with professional management institutions. In Tokyo, in 1987, during the International Conference of Quality Control with the theme "Quality first—again and ever" the ice was broken, when I, as President of the European Organization for Quality, met Mr. Kuilman and Mr. Van Ham from Holland. These two gentlemen were under the leadership of the later President C. van der Klugt preparing the creation of a new institution,

The European Foundation for Quality Management (EFQM) with the aim to enhance quality management in Europe. We agreed in Tokyo that both institutions will closely cooperate in looking for synergy effects on both sides - the general management and the quality experts ^[6].

Certainly, the Japanese model and the influence of Dr. K. Ishikawa played an important role in the development of quality disciplines in Europe. This is also true for the new European Quality Award, which is under preparation by EFQM with the full support of EOQ and which, in 1992, will become the European counterpart of the well-known Japanese Deming Prize.

In concluding, I iterate Dr. K. Ishikawa's merits in the field of quality discipline in general as well as for Europe. I wish to add a personal remark: I highly admired Dr. K. Ishikawa as a pioneer and an academic teacher. I am proud that I had the privilege to know him and to cooperate with him.

(Professor, the University of St. Gallen; Former President, EOQ; Member, IAQ)

Literature

- [1] Seghezzi, H. D. (1986): "On a New Course of Action: Quality and Top Management," *EOQC Quality*, 4, Editorial.
- [2] Kogure, M. (1966): "Production Rationalization versus Product Quality as a Management Problem," Proceedings of the 10th EOQC Conference, Stockholm, pp. 49–53.

- [3] Ishikawa, K. (1966): "Some Experimental Methods for Bulk Material Sampling," Proceedings of the 10th EOQC Conference, Stockholm, pp. 181–187.
- [4] Ishikawa, K. (1983): "Qualität und Qualitats management in Japan," in G. J. B. Probst (Hrsg.): *Qualitäts management: ein Erfolgspotential*, Haupt, Bern, pp. 85–93. ("Quality and Quality Management in Japan," in G.J.B. Probst; *Quality Management: a Potential for Success*, Publisher, Haupt, Bern, pp. 85–93.)
- [5] Seghezzi, H. D. (1987): "A new Strategy and a New Name: European Organization for Quality," EOQC Quality, 3, Editorial.
- [6] Seghezzi, H. D. (1989): EOQC Quality, 3, Editorial.
- (6) The United Kingdom

Professor Kaoru Ishikawa Heralding A United Kingdom Quality Revolution

David Hutchins

My initial interest in Japanese Style Total Quality Control was aroused in the mid 1960's, when as a Production Engineer in a Piston ring, gudgeon pin and piston manufacturing company, I was given the opportunity to examine some equivalent Japanese products which had been acquired by our Sales Department. Even at that early stage in Japan's emergence as an advanced industrial nation, I was shocked by the high Quality both in terms of dimensional accuracy and the physical characteristics of the materials. Because Quality was a major problem for my company and the need to discover ever more exact methods for improvement was at the core of my job, I puzzled greatly as to how Japanese companies could achieve such standards.

In those days, before the revolution of mass travel on Jumbo Jets and Satellite television my ignorance of Japan its culture and its methods was almost complete. Virtually nothing was written about Japan in the English language, and most stories about industrial life bore more relation to fiction than to reality.

However, in 1974 I had the good fortune to be the Secretary and Publicity Officer for a branch of the British Institute of Quality Assurance which was planning to host a lecture tour by Dr. Noriaki Kano. Having been given the responsibility for preparing this before taking one year's leave to study for a Master's Degree in Quality and Reliability, I prepared the publicity for the event but was not unfortunately able to meet Dr. Kano at the time of his visit. However, I could hear of his lecture from my friend who had attended and I got a strong interest in Japan. From what I had managed to learn about Japanese management from the British Press, I had a strong suspicion that it was fundamentally wrong. At that time, the Western approach to quality control differed from that of Japan. Quality Management was not considered as part of production but parallel to production as a compliance issue. I considered this approach was completely wrong. My impression from the feedback from the lecture by Dr. Kano was that a completely different approach was conducted in Japan.

My wish to study more increased but the material which I could obtain was only Dr. Juran's famous "Quality Control Handbook". Fortunately, I did not need to wait for long because a friend who knew my wish informed me that Prof. Naoto Sasaki would come to U.K. shortly and he arranged my meeting with him. Prof. Sasaki mentioned that he had a close relationship with Prof. Kaoru Ishikawa and mentioned that Prof. Ishikawa would be very interested in my view on the difference of quality management between the West and Japan. And then he mentioned that he would discuss this with Prof. Ishikawa.

About two months later in late 1978, I received a large package of publications from Professor Ishikawa, (fortunately written in English). Included was the famous special edition of the statistical proceedings which featured Professor Ishikawa's approach to TQC. I remember reading that paper one evening and part way through experienced an overwhelming sense of great enlightenment. I realized for the first time that there was nothing inherently Japanese in the fundamental concepts. At that moment it seemed to me that the essence of TQC was embedded in the belief that each individual is the expert in his or her own job and that, therefore, it is the responsibility of management to galvanize the resources of all of its people to work towards making that company the best in its field.

The concept as described by Professor Ishikawa recognized the need to respect mankind, to encourage self-respect, mutual respect, pride and loyalty. These were all good features and were not present in our industrial culture at that time. I burned up inside with a desire to do something about it but didn't know what. I talked to several people and my enthusiasm was infectious. In the end I took a big personal risk and organized a major 3 day conference in London. I invited Professor Ishikawa to be the keynote speaker and to my great surprise and pleasure he accepted the invitation.

The conference took place in September 1979. This was a time of severe industrial relations disputes in the United Kingdom and people were looking for a different approach. Partly for this reason the conference was well attended.

Prior to the conference I had a number of concerns, one of which was the fact that Professor Ishikawa refused to even consider the use of an interpreter. He said that he would speak in English. One or two friends of mine who had met Professor Ishikawa personally, notably Dr. Thoday, President of the EOOC, told me that they were not so sure that he would be understood. However, he insisted and so I had to await my own first hand impression. In the event, whilst I would say that it was not always easy to listen: particularly at that time when English people were less familiar with Japanese sounding English, his message was so powerful and the interest levels sufficiently high that there were no complaints. One or two people commented, but then said that if we are to learn from Japan we must accept the responsibility to listen even if it is not always easy. I was relieved and noticed that this problem was dumped by the charisma and abundant experiences of Prof. Ishikawa.

On the day. Professor Ishikawa lectured for four hours with no slides or notes. He wrote everything on the overhead projector and used up an entire scroll. People were fascinated with this ability and retained their attention throughout. I still have the scroll to this day.^{*} Afterwards Professor Ishikawa confided to me that he had forgotten to bring his materials from Japan so he had conducted the entire event from memory. An exceptional talent.

The success of the event is still referred to by those who attended and it is widely recognized as being the key event which first initiated the interest in Japanese style management which followed. Unfortunately, however, my hope that Britain would quickly follow in the footsteps of Japan and to study and learn the multiple facets of TQC were not to be immediately realized.

The conference was a lesson in human nature because it proved that people mainly hear what they want to hear rather than what they are being told. Throughout his talk, Professor Ishikawa repeatedly emphasized that QC Circle is only a part of TQC and he was very careful to explain the meaning of TQC as a management concept. This is verified by the audio recording of his talk. However, after the event, the participants only remembered the QC Circle concept and quickly forgot everything else.

Over the next three to four years the QC Circle bandwagon began to roll but because it was not supported by TQC most of the programs failed. At first the belief was that Japanese style management could not work in this society but several years later with the successes of Nissan, Sony and others together with the imminent arrival of Toyota, these early assumptions are being revisited.

It is my belief that when the history books are written Professor Ishikawa's visit to

^{*} David Hutchins' Note in 2014 here from David Hutchins: Sadly no longer. We suffered a water pipe burst some years later and the water soluble ink dissolved completely but I do have the full transcript on reel to reel tape.

the United Kingdom will prove to have been as relevant to our society as his contribution has been to that of Japan.

(Chairman, David Hutchins International)

12.4 Prof. Ishikawa and Brazil

QC Circle: The World Is Orphaned[†]

Jose Eustaquio M. Carvalho

Since April 16, 1989, we cannot count on Professor Kaoru Ishikawa: he is no longer with us. Founder of the movement called Quality Control Circle – QCC, the most powerful tool for participation of workers in the effort to provide total quality in any organization, he left a gap which will never be filled. The youngest among the best international specialists in the area, Professor Ishikawa dedicated 40 years of his life to the construction of the "Japanese Quality Model". During the eighties, his work was directed to a great extent to other countries, when he began working as a consultant and as a lecturer in conferences and seminars on consciousness-raising. He thus worked among very different cultures and in many different stages of economic development. From China to Italy, from Brazil to the Soviet Union he was tireless in his efforts to spread his ideas.

He has been in Brazil three times. In 1986, we invited him when we were coordinating a nationwide agenda of events called "1986 - the Year of Quality," as part of the Productivity and Quality Program - PQP, which at the time was being carried out by the former Secretariat of Industrial Technology of the Ministry for the Development of Industry and Commerce.

His itinerary included seminars and company visits in Sao Paulo, Porto Alegre, Rio de Janeiro, Camacari, Salvador, Belo Horizonte and Brasilia. Total audience of his lecturing reached as many as 1,500.

We accompanied him for twelve days out of a total fifteen-day tour. As we spent every day with him, we were able to know that Dr. Ishikawa is also an ordinary person out of his specialty. For me, the most memorable moment was when we extended our expression of greetings of welcome in most common Latin American way to his wife, Keiko, he immediately showed his discomfort lightly as probably he was not aware of

[†] This article has been translated from the Japanese version back into English, since the original one written in English is missing.

our style.

I also noticed he could see through things very well. Dr. Ishikawa asked me how large my house was as most probably he had found Brazilian housing was rather large for the family size by visiting many places.

Besides, Dr. Ishikawa inspired us and made proposals so that we can face more challenges in quality control. It was regrettable that the Brazilian government missed a chance to hear his ideas and experience during his travels when he came to Brasilia.

His energy and determination to complete missions in the world might have been compared to an impulse of a youth to pursue self-affirmation.

His message, in any form of expression, was always centered on the importance of the human being inside (collaborators) and outside (clients) of the organizations. In this way, even having proposed Ten QC Principles for Vendee-Vender Relations, he dedicated and recommended to all that special attention be given to two fundamental points:

- 1. Permanent educational and training programs for all
- 2. Participation of the labor force in the decision-making process.

He left numerous friends who will miss him as much as we do. Those friends, I am confident, will continue to carry on his knowledge, in a quest for quality in their organizations.

Finally, still feeling the sadness caused by his absence, we join the chorus of orphans in Brazil and in other countries throughout the world, our grieving will never stop. Thank God for making us meet him and receive precious lessons from him.

Farewell, Professor Kaoru Ishikawa.

(General Manager, QA & T Associate Consultant)

12.5 Prof. Ishikawa and Australia

The Giant of the Quality World^{\dagger}

Merv Burt

Even though I met with Dr. Ishikawa for the first time in the early 1970s, it was regrettable we just saw each other until 1977 and time simply passed. Later, I made my acquaintance of him on two occasions of the IAQ convention held at the United States

[†] This article has been translated from the Japanese version back into English, since the original one written in English is missing.

in 1977 and ICQC '87 in Tokyo. Subsequently we could meet whenever either I visited Japan or when Dr. Ishikawa visited Australia for his first time for ISO-related project, TC012, or when we participated in IAQ conference, in various parts of the world.

In late 1970s, I had the opportunity to observe a large production facility in Japan very extensively. Thanks to Dr. Ishikawa's arrangement, I went to Victor Company of Japan where he was consulting. I was fortunate to witness how some of QC principles and methodologies were in actual use. That plant, I recall, was producing television receivers. I was fortunate because I could see such sophisticated production lines at that plant at a relatively early stage.

Both of us continued to discuss on wide ranged subjects such as QC philosophy, principles of QC, practicing of QC, CWQC, QC Circle, human relations, motivation of employees at all levels for better performance and more. Dr. Ishikawa was kind to introduce me to the activity of JUSE and he explained how it was related with quality enhancement in Japan as well as the effect of education/training program by JUSE to me.

My personal association with him covered a long time from when he was professor at the University of Tokyo to when he was President of Musashi Institute of Technology.

He was a person of extensive knowledge: he uniquely perceived industrial issues and he was able to discuss with me in English on very complicated and philosophical topics of quality, in particular causes and effects of problems in manufacturing industry and service industry respectively. I was impressed with his ability.

Looking back, he was one of the closest friends outside my country I will keep my memories of him, such as priceless exchanges of opinions and his influential role to expand my own perception of quality for the rest of my life. Dr. Ishikawa was one-a-kind person in various aspects and a "giant" in quality field but the other side of his personality was casual and relaxing. I remember when we, Dr. Ishikawa, his associates and me, had a heated discussion on quality and standardization and we found a Suntory whisky bottle was empty and it was almost daybreak time. That was our discussion at a room in Kyoto Hotel while sitting on the floor. The casual mood at the room made us to talk intensively and it was an unforgettable experience.

Dr. Ishikawa certainly was very influential and his publications are well known in Australia. However for me, I wish to remember him for his encouragement and inspiration to conceive a new kind of thinking to approach conventional problems.

Throughout our association over twenty years, Dr. Ishikawa enlightened me about Japanese approach towards quality as well as its effect on made-in-Japan products in global market. I am still grateful for his information and I will always honor his memory as the person who made me comprehend such diverse topics as philosophy of quality in Japan, theories on quality and practice. With such knowledge, I was able to obtain more precise recognition of Japanese way to deal with quality through both my job at the Standards Association of Australia and my own commitment to educate and train in Australia. I thank God for my acquaintance with such a wonderful person like Dr. Kaoru Ishikawa.

(Managing Director of MBC Management System; Former chairman of Australian Organization for Quality)