Chapter 4

Prof. Kaoru Ishikawa's Personality

4.1 Analyzing Professor Ishikawa by QC Methods: His Personality as Shown in a Questionnaire Survey

"What would be a straight forward expression for Professor Kaoru Ishikawa's personality?"

Based on 313 primary data contributed by 80 writers for this book, we carried out "analysis" by using the QC Method that Professor Kaoru Ishikawa always said.

First of all the following chart is the result from Pareto Analysis.



As shown by the Pareto chart the greatest number of people referred personality

points were:

"Big-hearted and caring"

"Sympathetic, warmhearted, attractive humane, broad minded and generous"

"Man of action-a human bulldozer with computer"

Then by using Fishbone Diagram (Cause and Effect Diagram) developed by Professor Kaoru Ishikawa, the following diagram was made for analyzing the original data (drawn by Mr. Shiro Ohtake, Kajima Corp.).



From above, Professor's personality can be explained by following big branches:

- broad minded, generous and straight speaker
- Frank, big-hearted and caring
- Man of action—a human bulldozer with computer
- Hobbies and habit—communication with drinking, heavy smoking, golf, photos, flowers, heavy bags, etc.

Among these points we picked the first three which are considered to describe his character directly and applied these as titles for the following articles of this book. Also we inserted the most relevant articles among the many contributed. Furthermore, we

[†] Man who likes to look out for the welfare of others.

have analyzed by the quantification method III utilizing the writers' data and comments as category. The result comes out like the following. The plot on I-axis and II-axis is shown for reference.



- Personality elements plotted around the center are humaneness, generosity, QC Field contribution, approachability, and hobbies and habit. In addition many writers recognized Professor Kaoru Ishikawa as:
 - A broad minded, generous QC Field leader;
 - Person who cherishes human relationship (communication with drinking);
- (2) The properties of the main axes by the result of analysis are as follows:

It is shown that the I-axis as "thoughtful pursuit of individual real nature ('methodical,' 'acute insight ability')" and "bold and concrete action ('effort,' 'bulldozer,' 'belief,' 'positive,' 'practical')," the II-axis as "earnest hard-working leader/boss ('effort,' 'systematic,' 'boss')" and "big vision and action ('luck,' 'bulldozer,' 'engineer,' 'long term world view')," and the III-axis as "a lot of curiosity ('positive,' 'hobby,' 'earnest')" and "knowledgeable and friendly ('knowledge,' 'luck,' 'equality,' 'generous')" at both ends on axis respectively.

(3) As a next step we carried out an analysis following writers' grouping and classification such as affiliation (university, company, association, etc.), status

positions (professional, consulting company, office, friend/family, etc.), generations, etc. may show their own trend or not. For instance, professionals tend to point out his power of action but, on the other hand people in companies who got his counseling tend to point out his thoughtfulness. Concretely, sample scores allocated to writers have been analyzed by stratifying with the writers' grouping, but no difference in trend was found from them. In other words, professor's personality was equally perceived regardless of the belonging organizations, status positions and generations. This explains that Professor Ishikawa did associate himself in equal manner with everybody, regardless of their position such as the company president, a promoter or an officer in charge.

Note: The above analysis was assisted by Mr. Shu Yamada, graduate school student of doctoral program in Management Science, Kano research laboratory, Science University of Tokyo.

4.2 A Man of High Caliber, Kind Minded yet Direct

A Generous and Warm-hearted Leader

Rokuro Hattori

Professor Ishikawa and I graduated from the same school, former Tokyo High School. However I hardly have any memories of him at that time. This is probably because we could not spend the time together; as we were both busy with different sport clubs, I joined a basketball club and he joined a tennis club.

After the war, I first met Professor Ishikawa after I decided to study Quality Control. I was so attracted by QC just after listening to a lecture of Professor Den Hanada at our company in Kyushu. It was the time when I visited Tokyo in order to participate in the MC Couse (QC seminar for middle managers, JUSE). As we knew each other when we were students, he found me sitting at the first row in his lecture, and during its break time he said smiling at me "I found it hard to give a lecture because you are sitting there." This was our starting point.

In the early 1960s Bridgestone where I worked started introducing TQC and the Professor gave some lectures about general subjects and some lectures for managers and other staff members, and thereafter he gave guidance in various areas. He frequently referred to Mr. Ryoichi Kawai, President Komatsu who was our classmates at the high school, a good example of the creative leader.

I cannot recall the exact year but it was the time when I worked at an affiliated company of Bridgestone in Shizuoka Prefecture. I picked up a phone in my dormitory ringing at 11 o'clock at night. With a noisy background I heard a husky voice. I recognized it was that of the Professor.

"Where are you calling from, Professor?" I asked, and then he answered he was at an inn near the dormitory. He told me that I should join this party after an alumni reunion of the undergraduate course of Applied Chemistry, the University of Tokyo. Next to my factory many graduates who majored Applied Chemistry at the University of Tokyo work at the factory of Chemical Hoechst. Then, he was probably informed from the factory manager that I was close to that inn. I still remember that I rushed to go there, got drunk, and chatted until 1:30 a.m. or 2 a.m. Later, one son of the inn's owner graduated from Musashi Institute of Technology; now he works diligently as the factory executive of our company. It was indeed a very wonderful connection.

If I describe Professor Ishikawa in a brief word, I would like to say "a generous and warm-hearted leader". Many people gathered around the Professor because of his warm heart. At the night of Symposium at Kowakien in Hakone, at the seminars in Karuizawa, or at overseas conferences, we would discuss matters loudly drinking whisky and water or Japanese *Sake* to be around the heavy smoker, Professor Ishikawa, in blinding smoke.

This good practice is succeeded to his followers and generates the occasions of communication among QC pursuers.

The respect and popularity of the Professor were enormous, not only in domestic Japan but also in foreign countries. At international conferences for instance, people that I met in the local town during intervals asked me whether I knew Professor Ishikawa or not as soon as I was recognized as Japanese. Then they would talk happily and proudly that they have met him personally or that they walked with him on some occasions. It was a common and usual scene.

Frankly to say that the Professor was not good at English. However, he attracted many people even foreigners gathered around him.

I regret now that we cannot see the Professor again. However his lessons remain in all over the world and grow steadily. I think the Professor is also satisfied with this.

(Former Senior Executive Director, Bridgestone Corp.)

Ability Warmly Embracing Everything Yukio Horie

There is a very common saying that "Time Flies Like an Arrow" and this fits very well in the context of the Professor. It has already been 3 years since Professor Kaoru Ishikawa passed away and it appears to be matter of yesterday!

Since he guided me even I was immature and I regarded him as an affectionate father, I was with great sorrow and bewildered just like a boat that lost its steering when I heard that he passed away. When I picture those days in reminiscence, his ardent guiding figure yet with a gentle look on his face at all times came up in mind just like a matter of yesterday. Even today I feel sadness and regret welling up in my heart.

Japan has obtained its current national power of a leading economic country as an effort of the promotion of the Total Quality Control. This was done so through special efforts made by Professor Ishikawa and many experts in this field, in particular I feel that it is not an exaggeration to say that Professor Ishikawa was an outstanding figure in this respect, and that he is the great benefactor who established Japan's World Leading Economy with its quality superiority.

The Professor's broad-mindedness was in his great ability embracing everything and he viewed everything from the global angle. He keenly taught people with passion, regardless of their company size or their position in it.

I have run my company following his teaching as my divine inspiration.

For over 30 years' of Professor's training and guidance since 1952, we have held the QC Circle Conventions with his initiative and instruction. This year counted as our 18th, and now we are able to expand it as a world convention.

His inspiration initiated a "Top Management Seminar for Cooperating Companies," and this has already counted as 16 consecutive events. He always attended the seminar with his wife, guided group discussions in the daytime. At night he would restart and hold ardent QC talks at the QC Bar without caring about the passing of time, which started by the suggestion of the Professor. I remember and miss his figure talking frankly to every participant without showing his great status or position.

I have countless memories of Professor Ishikawa. I wish to further contribute to the nation and society in my capacity by surely continuing to practice his teachings. I firmly believe that this way I can repay Professor Ishikawa with gratitude, and I will continue to do so. (President, Pentel Co., Ltd.)



Professor Ishikawa at first row of center right rushed to attend from his hospital at Pentel QC Top Management Seminar for Cooperating Companies (24th March 1989)

In the Palm of Prof. Ishikawa's Hand

Tadasu Fujita

In the Chinese novel *Journey to the West*, there is an episode where Sun Wukong is trying his best to flourish, but realizes he is still within Buddha's palm. Thinking back, I also find myself like Sun Wukong, running around within Prof. Kaoru Ishikawa's palm. Prof. Ishikawa's palms were very broad and accepted both good and evil. He would attentively listen to someone like me who would deliver weird theories, but if I try to deviate from the boundaries, he would just issue an alert.

When we established the Problem Solving Procedure, now being used for QC Circle activities, such an alert was issued. Professor Ishikawa had the opinion that QC circle activities should be conducted under the circle members' own will, and not under a framework such as procedures. I insisted that it would be easier to conduct the activities if there was a certain framework, and pushed through. When we went out for a drink, Professor Ishikawa sometimes mentioned this episode and said "Mr. Fujita could be persistent."

We made a video of this "Problem Solving Procedures" using ideas different from conventional QC, and this was released by JUSE Press in June 1989. Naturally, all those concerned began to question, "Had Professor Ishikawa seen this video, what would he have said?" I knew that not only I but also a lot of people cared Professor Ishikawa's opinion when we tried something different from his mind.

Whenever I shook hands with Professor Ishikawa, his palm was soft, moist, and warm just like melting people's hearts. Now that palm is gone. Due to no warning of Prof. Ishikawa, someone like me who kept running around the edge of his palm is forced to live constant strain. In other words, I was able to do anything as I like because I had the framework of Professor Ishikawa's palm.

(Director, Fujita Management Institute, Formerly of Kawasaki Steel)

Sermon Demon with Respect to Humanity

Tatsuo Ikezawa

1. In any time behave himself along with "Respect to Humanity"

This is a story about 20 years ago around 1968, when I visited the K Company with Professor Ishikawa for QC counseling. We happened to have a drink at a counter bar of Nishitetsu Grand Hotel in Fukuoka where we stayed. At that night there was nobody except us in the bar and the manager-cum-bartender. We talked about QC for a while but there seemed to be no show of customers, and I started to wonder with a bit of doubtful mind whether this bar can run in such slack sales.

Then all of a sudden Professor Ishikawa asked the bartender-cum-manager, "How do you intend to run this bar?" The manager was surprised at this question and flurried for a moment. He must not have been asked such a question from customers before. Professor Ishikawa did not hold back from speaking, and carried questions after questions of what he wanted to say such as "By what means do you gather customers?" The manager seemed to be in a trouble answering them. While listening to it silently I initially thought "Indeed this is why Professor Ishikawa is called a Sermon Demon", but gradually I started to worry that the young bartender might get angry and shout back. The sermon lasted half an hour as no other customers appeared.

To my astonishment the stubborn-faced manager said in the end with a smile "You are absolutely right. I appreciate your valuable opinion. Please come back again!" I was surprised at the Professor's marvelous power of sermon. I cannot forget this scene even now after 20 years have passed.

When one comes to realize the Professor's character that he views matters at the standpoint of his counterpart and communicates with respect to humanity, he/she

naturally comes to agree with him.

I assume that there were not a few staff even at JUSE, who were preached a sermon by the Professor. Although many admired Professor Ishikawa who put himself in other people's shoes, there seems to be nobody who hated him. It owes his integrity indeed. The Professor can be called in fact a Missionary in the TQC field as he lived through with QC Circle's fundamental idea of "Respect to Humanity" and his "All human beings are good by nature."

2. Political prophet

Since Professor Kaoru Ishikawa passed away in 1989, these 2 years have brought drastic changes: the unification of East / West Germany started from the Teardown of Berlin Wall, and the collapse of socialism in East European countries.

I had the opportunity to visit East European countries as a team member of the 21st JUSE Overseas QC Study Team in June 1991. I observed East Berlin followed by Hungary, Poland and Czechoslovakia.

During the trip I always recalled Professor Ishikawa's words: "Generally they use the words like capitalism, socialism and communism, but I consider them as free economy and controlled economy" (Refer to p. 35 in his book *What is Total Quality Control? The Japanese Way*). Unlike theoretically-minded politicians, the Professor probably mentioned his honest opinions from his international experience. It is not too much to say that the changes over these 2 years have followed what Professor Ishikawa said.

Also in the article called "The way of politics; do not control, but stimulate" (p.34), in the same Book, he mentioned that "Government officers, regardless of their countries, like regulative control, especially in countries of communism... I think the government should not regulate and control the private sectors but give various stimulations instead." I consider it as a wise remark that I wish the present officers in Japan would learn that. (Professor School of Science and Engineering, Wasada University)

(Professor, School of Science and Engineering, Waseda University)

Professor Ishikawa as My Teacher of Life

Kozo Koura

I met Professor Ishikawa for the first time when I was a staff at the Central Quality Control Committee of Nippon Kayaku Co., Ltd. while we were challenging the Deming Prize Examination (1963 awarded). Soon after I visited U.S.A. as a member of the 2nd JUSE Overseas QC Study Team, I have received much of Professor's intimate guidance for the country-wide promotion of QC Circle activities as the first secretary general of the QC Circle's Kanto Regional Branch. This directed my life with a principle of the Professor's "way of living."

In those days, among the stories which Ishikawa told us, there was one just after World War II. I heard that, when Professor faced the postwar time, he left these words at a farewell occasion: "When you hear the name Ishikawa, please think of a man making efforts to reconstruct Japan." This words remain in my heart without fading.

At the time when I retired from Nihon Kayaku at my retiring age, he immediately arranged for me to deliver lectures of various seminars and company guidance as a JUSE Counselor. My first counseling with the Professor was for Rhythm Watch Co., Ltd, which was about to undertake the Deming Prize Examination. Following this I asked the Professor to guide me as the chief for TOKAI PULP & PAPER Co., Ltd, Dainippon Printing Ink Manufacturing, and so on, and to lead TQC introductions and promotions. I cannot forget how soon the Professor attended the All Company (International) QC Circle Convention of Dainippon Ink and Chemicals even right after he had left the hospital, and how he participated at the Steering Committee of Tokai Pulp, while suffering from his serious condition at his re-hospitalized time. At the first steering committee, Tokai Pulp received his guidance of "There is an immediate effectiveness in traditional Chinese medicine" (Note: TQC as a traditional Chinese medicine is generally considered to have a long lasting effect). As a result of his contribution, they have recovered from their days of deficit, and now aim at setting up their new corporate vision. Also since1979 the Professor introduced me to the position of Quality Control lecturer at the Saitama Institute of Technology, Department of Mechanical Engineering.

My joint work with the Professor titled "Control Points of Quality" which received the 1979 Nikkei Quality Control Literature Prize is an important memorabilia.

> (Lecturer, Saitama Institute of Technology; Formally of Nihon Kayaku)

On The Buddha's Palm

Shoji Shiba

There is an old story of Sun Wukong (Monkey King) running around with all his energy, only to find himself within the Buddha's palm. As for myself, I would study hard, think, critically and invent ideas the best I can, and then understand completely. But when I thought this again the next day, I realized that such ideas had already been mentioned or practiced by Professor Ishikawa. I had experienced this on many occasions. Moreover, as far as the QC is concerned, this will be happened without fail on every occasion.

The recent example was that, in order to develop the future of the company, "Logic beyond current company logic is needed." We see a big limitation on the way of Japanese companies. Many people think that it is no good when we remain at the present situation, and I strongly feel the same.

At this point, I received a remarkable suggestion from Doctor Russell L. Ackoff, who is the authority of OR (Operations Research). Through this, I began to understand the phenomena that I previously had not recognized. I noticed "going over company's logic" was the secret source of the reason why QC Circle activity has spread all over the companies, industries and even countries.

Among 3 fundamental principles of QC Circle I can say that the improvement and development of company constitution could be the "company logic". On the other hand, the 2 other principles, "respect for humanity" and "infinite development of human ability," are surely logic over this. "Yes indeed, that is why I now understand." I had a feeling of a fresh discovery in my mind.

At that very moment, I suddenly pictured in my eyes Professor Ishikawa calmly smiling at me, and I heard his voice saying, "Did you understand finally?"

(Professor, Social Engineering, Tsukuba University)

4.3 Plain-Speaking Leader, You Could Count on

Prof. Ishikawa and I

Masashi Asao

I met Professor Ishikawa for the first time when I took part in the 3rd QC Basic

Course held by JUSE in the Mitsui O.S.K Line Building, Yaesu exit. I remember he was giving a lecture on sampling.

After that day, I started to get involved in his promotional endeavors of QC in the Kansai region. I have many good memories of him, and would like to introduce some of them here to you.

The first memory is from the spring of 1955. Mr. Kazufumi Seki from Toyobo set up a gathering, and we played mahjong with the Professor in their dormitory which company ran in Kitahama, Osaka. The dorm janitor asked how much Japanese *Sake* we needed and Mr. Seki answered one bottle each. There were four 1.8 liter bottles of *Sake* in the room at the beginning of the night, and I was amazed to see them all empty in the morning after the all-night mahjong session.

It was my first night out without informing my wife of my whereabouts, so I decided to ask Professor Ishikawa to write down on his business card what we had been doing, as a proof that I was with him all night. This was talked about by him many times after.

The second episode is from 1959, when I took the 2nd State Professional Engineer Examination. Professor Ishikawa happened to be my examiner at the interview test held in Tokyo.

First, he wondered what questions to ask, and then mentioned the stagnant business situation surrounding my company at that time. He said to me, "You are one employee member of the company but why has it happened?" It sounded like he was blaming me for the situation, despite the fact that I was just a young 37-year-old section manager. I was really not sure what to answer.

Professor Ishikawa had been enthusiastically promoting QC and was confident of its effects, so I then understood that he was actually trying to encourage me to work harder. Fortunately, he let me pass the exam.

My third memory is from the time we published *Product Liability* (JUSE Press) written and edited under the name of Professor Ishikawa. I was hesitant to write as I felt I had not done enough research, but he encouraged me saying, "You may feel you are embarrassing yourself by writing a book, but you can regard it as a steppingstone and grow."

I am still so grateful for these words as I believe they eventually formed the basis of my current situations where I can acquire information of product liability at an international level.

In 1990, I attended the annual meeting held in Milwaukee as an IAQ member, which I became due to Professor Ishikawa's recommendation. This was an opportunity

to witness the cooperative bonds between those in the QC field of the international arena.

(Advisor and Former Senior Managing Director, Tanabe Seiyaku Co., Ltd.)

Memory of Professor Ishikawa

Ikuro Kusaba

When I hesitated to make a clear decision on daily problems, such as at the education field, in associating with company people, human relations and so forth, I thought Pro. Ishikawa, what did he make the decision about it. Considering Prof. Ishikawa's decision, I quite often followed it.

This was probably because, during our long-term friendship since 1949, I observed that the great majority of what Professor had initiated resulted in success.

He pursued things thoroughly until he was convinced. He sometimes appeared to be easy going, but his care was precise. He looked not only after his students, but also looked after everybody. That's why there were no any factions like the Ishikawa School.

The Professor was an extremely fast reader. When I was in Musashi Institute of Technology, a document that had been sent to him from abroad was circulated from the President room. When I opened it, I noticed that important points were underlined and marked. He took information and knowledge rapidly even at his busy time, and indeed, hardly anybody would be able to catch this.

When the Professor traveled to Malaysia, the customs officer asked him while examining his passport, "Are you Mr. Ishikawa who invented Ishikawa Diagram (Cause and effect Diagram)?", and his affirmative response of "Yes" gave him a better treatment. He related this episode with a wry smile saying, "It never happens in Japan." and I thought he was more famous in overseas.

Although there might be better English speakers, the Professor had a great power in his talks to persuade even foreign people.

There are some famous people who give inaccessible, overbearing atmosphere from time to time. The Professor, in contrast, did not have it at all, and even at QC Circle conventions he talked to the participants in a friendly manner. In such a way I have associated with him with freedom and ease, but only nowadays I come to realize deeply his greatness. (Professor Emeritus, Nagoya Inst. of Technology)

In the Lobby of Anchorage Airport

Kamematsu Matsuda

The night of August 10, 1982, it was a sweltering evening, as if I was standing in front of a burning furnace. By putting on suit with a tie, having a 10 kg suitcase, sweat was running down my back and I felt like I was almost suffocated. Despite this, I was excited about the trip to Europe. I was hurrying to Narita airport to travel as the editorial committee member to celebrate the 20th anniversary of FQC Magazine and its circulation of 100,000 copies.

When I arrived at the lobby of Narita Airport check-in counter, more than half of my fellow were already relaxing there. Some of them had taken their jackets off and opened their shirt collar, and some were more relaxed in their polo shirts. I saw Dr. Ishikawa among them, putting on the uniform of QC Circle Cruising Seminar with his lips tightened but his eyes smiling.

"Ishikawa-sensei, that jacket is very useful, isn't it?" I asked.

"Yes, this jacket has many pockets" Dr. Ishikawa replied.

At that time I thought to myself, why did I wear a suit with a tie in a hot weather? I learned Dr. Ishikawa's flexibility in choosing suitable clothes.

We departed from Narita airport at 22:30, and reached Anchorage at around daybreak. We moved on to the passengers lobby during refueling. When I looked around, I noticed Dr. Ishikawa chatting with a couple of people who were also waiting their flights during refueling. After coming back from the souvenir, I came across Dr. Ishikawa again talking to a different person with a slightly bent forward.

"Whenever I am at Anchorage, I run into some acquaintances." He told me when we were back on the plane and he was sitting next to me.

Indeed, a lot of planes stopped by Anchorage to refuel. However, it is not frequent that a plane of the acquaintance arrives coincides with my plane at the same time on the same day. However, Dr. Ishikawa always met someone at Anchorage. I was really surprised by his showing how wide the social relationship he had.

We will never have the opportunity to learn from Dr. Ishikawa again. If, on the way to heaven, there is a passengers lobby like Anchorage, I hope that I may run into Dr. Ishikawa chatting with someone.

> (Director, Kyushu Creative Technology Institute, Formerly of Nippon Steel)

Prof. Ishikawa, Memories of a Godfather

Akira Iwata

After World War II, I was lucky enough to join Nissan Motors, where from relatively early stage, I began the research and study of quality control. For 30 years I was engaged in the promotion of QC activities, and so Dr. Ishikawa was a truly significant figure for me.

I first had the chance to personally interact with Dr. Ishikawa when Nissan Motors had decided to apply for the Deming Prize in 1958–1959, and had requested Dr. Ishikawa to lead our company-wide QC training and onsite counseling. As the contact person of QC Promotion Division, I received detailed guidance from Dr. Ishikawa. During the onsite counseling, some managers who believed exclusively in the technologies unique to Nissan Motors were infuriated by Dr. Ishikawa's candid remarks and began to complain that they have had enough of Dr. Ishikawa's counsel, which really troubled us. That is how difficult it was to promote the concept of control back then.

Dr. Ishikawa kept an earnest interest in the promotion of the QC activities of our company as well as our affiliated companies. He occasionally gave us a scolding as well as numerous advices. He gave a huge support to make Nissan's QC nowadays.

About 10 years ago, Dr. Ishikawa gave me various advices when I left the QC Department before the imminent retirement, and was appointed to the establishment of the college for automobile maintenance service, which was planned as part of the support system for our dealers.

Due to joining the K2 Climbing Team of the Waseda University Alpine Club as a student member, my second son had difficult time to get a job at Kajima Corporation. My son and I visited Dr. Ishikawa for counsel. Dr. Ishikawa said, "You're an alpinist, you should do well," and immediately made arrangements to help my son get a job at Kajima Corporation. These episodes show the side of Dr. Ishikawa like a God-father, and my son and I are still grateful for his kindness.

Now Dr. Ishikawa has passed away. I cannot repress the feelings of deep grief when I recall Dr. Ishikawa's office at the University of Tokyo, and his house in Tobitakyu that I had visited numerous times both publicly and privately, and his kind caring face in the president's room at Musashi Institute of Technology.

> (Master, Tokyo Automotive Technical College, Formerly of Nissan Motors)

Prof. Ishikawa for Me

Ryuichi Kobayashi

I graduated from the department of engineering at a university, but also took classes inclined strongly to mathematics (applied mathematics), and was interested in theoretical matters. I studied under Professor Jiro Kondo (presently the chairperson of Science Council of Japan), and was frequently visiting JUSE for work related to OR and statistical theory, and that is how I met Dr. Ishikawa.

Since then, it gave me deep pleasure to participate in Dr. Ishikawa's activities such as JUSE Sampling Research Group and learning from him. JUSE's quality control seminars flourished alongside the high growth of the Japanese economy, and we lecturers spent busy days.

For a time, I escaped from this busy life by slightly reducing my workload related to quality control to work as financial analyst. I wanted to work in a different field. I had a job at the Capital Investment Institute of the Japan Development Bank where we developed a program for precise and long term management plan. We have completed the software, which is still being used at the Japan Development Bank as the screening program for urban redevelopment financing. (This was back in the 1970s)

I was gradually withdrawing from jobs related to quality control when I ran into Dr. Ishikawa in the hallway of JUSE. He told me to attend the next QC Seminar for Executives which was to be held in Hakone. At that time, I gave lectures mainly on statistical theories for the QC Basic Course but had not witnessed the actual corporate management issues nor studied them. Dr. Ishikawa was very aware of that.

Thus, grateful for his advice, I applied at JUSE secretariat to attend the QC Seminar for Executives free of charge. Such case was unprecedented, and the secretariat seemed surprised, but gave me permission to attend the seminar as it was recommended by Dr. Ishikawa.

That was a turning point, and I went back to placing quality control related work as the center of my work. Later on Dr. Ishikawa added me to the team of instructors that instructed QC activities within Japanese companies. Dr. Ishikawa was the leading lecturer of the team. Through this activity, I am learning corporate activities, and am supporting and researching activities for quality improvement.

Looking back now, Dr. Ishikawa had been a university professor and a scholar but was also an individual with a natural born sense of a corporate manager. He had perhaps inherited his father's outstanding abilities. He had left monumental achievements. I am sure that his legacy will be passed on to the future generations.

(Professor Emeritus, Rikkyo University)

Devoted to Educating Young Instructors

Shoichi Shimizu

It was April 1950 at the University of Tokyo when I met Professor Ishikawa for the first time. The main reason I went there was to give a presentation at a conference, but I decided to visit him at his office as I wanted to ask him some questions. Although I did not have an appointment, he was very friendly and agreed to talk with me. He kindly answered my questions, and, moreover, invited me to take the next QC Basic Course, which had just been started, if I was keen on studying QC. It was difficult for me to travel to Tokyo every month, but I still had some valuable opportunities to learn from him after that day.

He was an open-hearted and easy-going person, and, at the same time, very considerate and caring of other people. For example, when he took me to some companies to give me the opportunity to engage in some hands-on training as an instructor, and provide QC diagnosis together, he tactfully saved me from embarrassment when I gave inaccurate or insufficient evaluations.

Professor Ishikawa always considered it important to foster potential leaders in order to spread QC, so he made an effort, especially training young lecturers. I believe I was one of them. In my case, he encouraged me to take on the position of chief counselor of a company and offered me his support. I appreciated him a lot. It was he who selected me to be the youngest member of the Deming Prize Committee, and also recommended me to become an academician of the IAQ.

He was a great person and a man of action with a broad point of view, and I think there were always well-thought- through plans behind all of his acts.

When he proposed the FQCT (Foremen's QC Circle Team) be dispatched overseas, I opposed him, because I doubted that the corporations would send their foreman level workers to overseas. However, he told me to persuade them to let their foremen go and you can make them happy about their decision rather than you worried about before. When I served as a leader of the 5th FQCT, the members and their bosses were very happy and thanked me profusely after the trip. I realized that Professor Ishikawa truly has foresight. (Professor Emeritus, Nagoya University)

My Wife's Driving License

Takanori Yoneyama

"I will leave the first half of the next lecture 'Control Chart Method' to you."

This was the first instruction given to me by Professor Ishikawa.

In those days the Quality Control Basic Course, hosted by JUSE, was the most fundamental and standard study course for QC learners, and its first lecture (of Control Chart Method) was one of the most authoritative, always given by Professor Ishikawa. Therefore, it was a big surprise that he bravely decide to delegate its first part to another person.

The Professor had been endeavoring to foster young talents for their future, and as part of it, he has ardently developed an introduction of so called dual lecturer system, in which he would leave the first half of the lecture to a young lecturer and he would oversee as an observer. Thus in any circumstances, the Professor would create an environment for young people to speak up and to take an action. I thanked him for his thoughtfulness and consideration of giving equal opportunities to everybody.

I also had various guidance and instructions from him at the editorial committee meeting for magazines. However I enjoyed more his talks as I listened to his talks after the meeting, while drinking at the local bar.

At one time, after the usual drinking party of the editorial committee meeting, I was on a taxi with the Professor, as our direction to go home was the same. All of a sudden, the Professor suggested, "Let's go to your house tonight," and so he came to my house making a fair length of detour. As it was too late at night I could not offer much hospitality, but the Professor did not care it at all. He persuaded my wife to get a driver's license by explaining how it is important talking about his wife, "If emergency happened in the suburbs, we would be at a loss."

A couple of months later my wife obtained a driver's license. And this helped enormously to our child rearing and caring for my mother. I received numerous instructions from the Professor. Not only I but even my family have benefited from him.

(Konica President)

Professor Who Gave Fair Consideration to Everybody

Akira Murakami

Soon after Denso Corporation won the Deming Prize, Professor Ishikawa made a special point to speak to me at a meeting of those promoting QC in various companies. He said to me, "You really had really good experiences through the tough work for Deming challenge. You must always keep purity in promoting QC." This was an invaluable word of encouragement and a lesson. I cannot forget these words even to this day.

For one QC meeting, Professor Ishikawa came out all the way to the lakeside of Hamanako. He engaged in a discussion with young QC staff of several companies until 3 a.m. drinking *Sake* with a large cup.

The next day, we decided to enjoy ourselves by getting up at 6 o'clock in the morning to go fishing, trolling in such a style that was famous in the Lake Hamanako. I was on the same boat with Professor Ishikawa. We tried hard but the tide was against us that day and all the boats seemed to have no luck. However, all of a sudden, the Professor got a big tug. His fishing rod almost got dragged into the water.

"Professor, you have a catch! Pull your rod up, please!"

"Wow, this is a really big one! I can see it! What is the zoological name of this fish?"

"What does that matter? Just pull up your rod more vertically."

After all this commotion, we finally caught a fish onto the boat. The fish was a sea perch that was nearly 60 cm in length. That day's catch was only this one fish that Professor Ishikawa had landed. All of us had absolutely nothing to show for our effort.

"Professor, you are very lucky."

"Don't be stupid. I am good at fishing! How long have you been fishing? You are poorer than I."

That was how the conversation went on that day. After that, for a few years, each time I met Professor Ishikawa, he greeted me by saying, "You are a poor fisherman." "You are a poor fisherman." Actually he expressed his thanks for that day saying me like that. (Councilor, JUSE; formerly of Denso Corporation)

Thank You, Prof. Ishikawa

Kenji Kurogane

Around 1955, I needed to conduct statistical processing in relation to resource research for tuna at university where I worked, so I decided to take part in a JUSE's quality control seminar, as a note taker. My job was to write a report of a three-hour lecture in about 20 pages, which would be printed in a monthly lecture report. Despite his busy schedule, the Professor always read his part thoroughly and made a lot of necessary corrections and comments with a red pen. When we finished this 6-month seminar, he suggested that I help with his QC endeavors, which gave me the opportunity to be involved in the QC field rather than remaining as a fish expert. Without his suggestion, my life would have been completely different.

Quality control is sometimes called "control of human quality," and the interrelationships among people are very important on promoting QC. Although the professor paid careful attention to details, he was a boss who trusted his staff without giving any specific instructions. One night about ten years ago, with regard to my QC consultant work, he phoned me and told me that I had been looking after only the companies that had been staying in the black. He then told me to take on a company in deficit. It was a very forceful request, of course, no choice but to work with the company. Perhaps this is a typical example in describing his character.

About one and a half years before he passed away, when the brewery company S was working toward challenging the Deming Prize for the following year, he invited me to go there with him for QC diagnosis. This was to be my last consultant work with the Professor. In the QC world, we often learn from our seniors through these hands-on sessions. I have learned enormous amount of important QC knowledge and expertise over the years from the Professor, but I regret that I could probably have learned a lot more from him.

I have a lot of photos of him including those from his youth, and some of them he directly handed to me. With these precious memories, I hope he will rest in peace forever. Thank you, Professor Ishikawa.

(Counselor, Union of Japanese Scientists and Engineers; Former Researcher at National Research Institute of Fisheries Science, Tokai Region, Fisheries Agency)

Receiving Advice for Publishing My Book

Hideo Yoshikawa

It was in my days as a note taker of the Black Copper Sampling Research Group, JUSE, in 1951, when I received guidance from Professor Ishikawa. In those days, group members participated from Tohoku, Shikoku and Kyushu almost every month and received guidance from Professor Ishikawa. They made an effort to establish a new method of sampling in Japan. As I was told to study more statistical methods by the Professor, I studied with Professor Yoji Akao as a note taker for the 7th QC Basic Course. I gradually put myself in the QC field by receiving even more guidance from Professor Ishikawa, and helped him with such things as calculations of *The Control Chart Method* and proofreading works.

Just about that time, we were about to run a case study of introducing QC to the companies in the magazine *Hinshitsu Kanri* (Statistical Quality Control). Professor Ishikawa and many other professors started teaching for Yamato Electrics, and I was then employed there so that I could report action records of their QC activities. This was the start of my QC activities.

Years later, Professor Ishikawa introduced me to Nissan Diesel Industries, where I introduced Total Quality Control and a QC application to replacement parts' control. With its successful result I published a book *Practices of Inventory Control*, in which Professor Ishikawa gave me his preface message. Moreover, the Professor gave me many words of advice for my book called *Procedure Collection of Statistical Analysis*. If I continue to remain somewhat useful in the QC field, this is solely because of Professor Ishikawa's guidance.

I believe that I have been able to practice correct QC because Professor Ishikawa warmly watched me over regardless of where he was, and this thought has given me encouragement and direction. I'm not great like Professor Ishikawa, however I wish to do my best to extend Professor Ishikawa's philosophy to as many people as possible by cherishing today's Japanese QC tradition, which was progressed by Professor Ishikawa and many other people at actual work places since 1950's.

Professor Ishikawa, please keep on watching over us.

(President of Intelect; Former member of Nissan Diesel Industries)

"Ishikawajima-Harima: How Is Your TQC Going?"

Ms. Keiko Hasegawa

My home is located in Chofu (in Tokyo) and it takes 5 minutes' drive to Professor Ishikawa's house. When my company (Ishikawajima-Harima Heavy Industries Co., Ltd, Aerospace Divisions) challenged the Deming Prize, I quite often visited his home for communication purpose. As I have heard that his house was once called the "Ishikawa Farm" by his neighbors, I was surprised at its large garden with deep green trees stretching inside from the gate. At the front of the gate, there stood a signpost indicating the directions to his brothers' houses, and his house was located some distance away from the left of the signpost. Every time I visited his house, Mrs. Ishikawa showed up first and the Professor appeared after, saying, "Ya, Ya" in a friendly manner. I believe his big-hearted character was formed from such an environment. Somebody asked him, "How many books do you have, Professor?" and he replied, "Well, in about around so-and-so meters." I think it was typical of him without saying actual number of the books.

After our Corporate HQ was awarded Quality Control Award for Factory by Deming Prize, whenever the Professor saw my face he asked me, "I heard the Ishikawajima would promote TQC in all company level. What is the progress since then?" and I could not hold my head high and so said repeatedly, "Yes Sir, we are studying it steadily." After 3 years of repeating the same dialog, the Professor stopped asking and I was relieved. I think he guessed the difficulty of circumstances at that time. However, since I have been asked the same question every time I saw the Professor, I cannot forget his words and I feel that he is speaking to me from a distance with his hoarse voice, saying, "How is Ishikawajima going?" I feel deserted without seeing the Professor's face anymore, as I have always noticed him sitting at the front row in the Committee Meeting of *QC Circle-monthly magazine* and Symposium. I do not have a reality of his death yet. I will probably hear his voice, "How is it going?" in my head forever.

(Formerly Ishikawajima-Harima Heavy Industries Aerospace Corporate HQ, TQC Promotion Manager)

The Teachings of Prof. Ishikawa

Yoshinobu Nayatani

I met Professor Ishikawa for the first time in Osaka, at a lecture in JUSE's QC Basic Course, which started in April 1954. I think he was still in his late 30's then, but he was already the leader in the field of quality control in Japan. Even now, I often recall how he delivered a number of lectures on QC practices with real confidence and passion.

I had numerous opportunities to learn from him through subsequent meetings, including those of the Deming Application Prize Subcommittee, as well as TQC counseling sessions held at different companies. I would like to introduce a couple of examples here.

The professor introduced a method that simplified quality control, making it easy for companies to put this into practice. At the same time, he was anxious that the direction the QC field was leaning towards was becoming too detailed and complex. For example, he always said we needed to focus only on "improvement and sustainment (standardization)" in terms of policy management and daily management. Considering how hard it is to differentiate between these two types during quality control practices, I feel it is very important to go back to the basics as Professor Ishikawa emphasized. Although quality control has become more systematized due to the introduction of a variety of other management systems, I feel it is crucial to establish an easier and simpler QC method that can be conducted by companies, who, after all, are the actual users.

Another example was his generous support for the Seven New QC Tools we introduced in 1977 and the subsequent promotion of them. This was originally researched and proposed as early as 1969, as we felt some kind of future direction was needed for quality control. However, there were some criticisms leveled at this, and mostly, I believe, due to the immaturity of many of us. At the symposium on the Seven New QC Tools held in March 1985, he attended a special lecture and offered his vision on the application of the tools. He also introduced it overseas using *Reports of Statistical Application Research, JUSE*. Consequently, at present, there are a number of companies that have implemented the tools in the direction at which the professor suggested.

Finally, I would like to express my great respect and appreciation for Professor Ishikawa and all that he did in teaching us.

(Professor, Department of Management Engineering,

School of Engineering, Osaka Electro-Communication University)

"Seven QC Tools Can Solve 95% of All Problems"

Katsuya Hosotani

It was October 1962 when I first met Professor Ishikawa at the 23rd QC Basic Course organized by JUSE. At that time, I was working for Nippon Telegraph and Telephone Public Corporation (NTTPC), in charge of technological investigation and equipment management for telephone switchboards. I took part in the professor's lecture on control charts as a note taker, so my job was to write down the lecture note during the session and write up a monthly report to be distributed to the participants in the following month. My notebook during the three-hour session became completely filled with notes, so it was very difficult work for me to put them together into a ten-page report.

After that, the professor was always very supportive of me. He told me that I would not be able to stand on my own two feet if I just stuck to QC for NTTPC, and took me to various companies to give me learning opportunities. I was very impressed that he took extremely detailed notes at TQC counseling sessions, and remembered almost everything discussed.

I have other great memories of him too, and would like to share one of them with you. We were in Kobe International House in September 1984 attending the conference to commemorate the 20th anniversary of the QC Circle Kinki Regional Chapter. During a panel discussion, I, who was acting as the leader of the session, heard a snoring coming from my left. I was very surprised and hurriedly moved the microphone away from the professor, as we were on the stage in front of over 1,200 participants. Then, when I asked a question about the future prospects for QC Circle, amazingly, the professor immediately raised his hand to give a straightforward answer. I was very surprised and then realized just how differently the structure of his brain was able to function compared to ours.

I asked him to write introductions for my books many times, and usually very close to the deadline, but he never showed any reluctance and always kindly accepted my requests. Also, he always took the time to read through all my drafts before writing the introduction.

In the introduction of one of my books, *Seven QC Tools (Easy QC Method Exercises)* (JUSE Press), he stated that 95% of all problems could be solved if these

seven QC tools were used properly. This book was made a bestseller with the issue of 70 editions, because, I believe, his words were so convincing.

It is really heartbreaking to lose such an excellent leader and mentor, but I will continue to make great efforts, in remembrance of his passion, to spread TQC, and to make society richer through TQC.

(President, Quality Control Research Institute)

4.4 A Man of Action: A Bulldozer Equipped with a Computer

A Master of Hetero-catalysis

Sigeiti Moriguti

Ishikawa-san was compared to a bulldozer. His great massive and powerful ability to get things done certainly gave him that aura. And not only that, he was also equipped with tremendous leadership and organizational abilities that enabled him to gain an insight into each person's individual characteristics and bring personnel with different ability to work together toward a common goal, achieving meaningful results.

I participated in the QC Basic Course from the outset at Ishikawa-san's invitation, taking charge of the lectures on statistical theory. Keeping "proof" based on mathematical formulas to a minimum at his recommendation, I used examples of experiments to enable participants to get a feel for the theory. I believe this approach was welcomed. On the other hand, on the courses organized by the Chemical Society of Japan (which Masuyama-san recommended me for, if I recall correctly), I was in charge of explaining "weighing problems." Hiroshi Nakasugi chose showing how this theory actually works as the topic for his graduation thesis; I remember with great fondness how we borrowed a crucible and analytical balance at Ishikawa-san's laboratory and did a demonstration. (Through the efforts of Genichi Taguchi, this theory subsequently came to be known in the form of orthogonal arrays, giving rise to many practical examples.)

When it came to the sampling of particulate materials as well, you could really see his tenacious nature, trying everything he noticed and saw until he was satisfied. I will never forget how, in this process, a question he asked about the confidence limits of variance components became a positive stimulus for my research.[†]

[†] Moriguti, S. (1954). "Confidence limits for a variance component," *Rep. Statist. Appl. Res. JUSE*, **3**, pp. 7–19.

In Deming Prize examinations as well, his desire to look past the appearance in order to see the reality sometimes manifested itself in a manner that could appear unreasonably obstinate, but it is clear that very attitude was tremendously effective in maintaining both the prestige of the Deming Prize and the dynamism of quality control. The basis of the success of Japanese quality control lies not in the efforts of a minority of experts trained in ivory tower alone, but in fact that people with a huge array of different qualities joined forces to work on developing it. This was entirely thanks to Ishikawa-san, who was without parallel in his ability to bring such a different people together to achieve a common goal.

(Professor Emeritus, the University of Tokyo)

There are Hardships Anywhere, Anytime

Teiji Yokobori

I feel heavy hearted when I talk of the memories of Dr. Ishikawa. I feel as if I am still receiving support from Dr. Ishikawa, who liked to talk about future dreams and take great strides with great ambition. After World War II, when QC was in its dissemination phase, a group of young men centering Dr. Ishikawa were all filled with a sense of mission as the torchbearer of industrial recovery.

Various committees for QC development would get into heated discussions, and would flock into bars for further extended discussions, which would become so intense that at the end of the night, we would storm into the residence of Ms. Haruko Mitsuaki. Gaining momentum, the battle line expanded. Statistical theory broke out from laboratories and classrooms and spread into places where it was actually applied, i.e. into corporate manager's offices. Since we were okay with storming into the residence of someone's wife, we also had no problem with storming into the residence of big shots. And always in the center of the storm was Dr. Ishikawa.

Dr. Ishikawa was tough on ostentation and negligence, and was looked upon as the Savior by the front liners out in the field of industrial recovery. I have heard of an episode regarding Dr. Ishikawa from Mr. Yasuo Makino (Former chairman of the Nippon Telegraph and Telephone Public Corporation), a well-known dare devil. During Mr. Makino's years at Junior High School attached to Tokyo Higher Normal School, Dr. Ishikawa was 2 years senior to Mr. Makino. Dr. Ishikawa was then the leader of the cheer group. Mr. Makino had ditched cheering practice, and was threatened by Mr. Ishikawa ever since. Whenever the discussion became heated and Dr. Ishikawa began

his dialogue with the famous "You bastard, your opinion is...," I would imagine the fiendish expression of Dr. Ishikawa as the leader of the cheer group.

Around 1955, I was appointed the chairperson for the QC Conference with the theme of consumer affairs. At that time, as a reaction to the suppression of speech during the war, the trend was to get a kick out of defeating the opponent during debate. Back then, due to lack of commodities, the manufacturers had the superiority, and even though we felt that we had a fair debate, we caused an emotional confrontation with the representatives of Japan Housewives Association regarding topic such as 10 yen croquette that was arousing public criticism. Dr. Ishikawa was the one who saved the situation, asking the representatives of Japan Housewives Association, "Does your opinion represent that of housewives?" which had a calming effect on both parties. Ever since, a tough Dr. Ishikawa and a kind Dr. Kaoru coexisted. I ran into Dr. Ishikawa many times while he was running around on errands other than QC, trying to solve the campus dispute. If, in the afterlife, you wish to run into Dr. Ishikawa, it should be easy. You just look for disputes, and Dr. Ishikawa should be there busy trying to solve the problem. (President, Nakayo Tsushinki)

Remembering Prof. Ishikawa: Emphasis on *Genjitsu*[†] and *Genba*^{††}

Hajime Makabe

Despite working at a university different from Prof. Ishikawa, I fortunately had many opportunities to meet him in person at conferences or committees. I had learned many things directly from him.

Around the late 1950's, I had been interested in the theory of sampling inspections and the related probability calculations. At that time, Prof. Ishikawa gave me the advice that knowledge of "*Genjitsu* and *Genba*" is important for studying quality Control (QC). In fact, he provided me the opportunity for visiting *Genba* several times.

I, of course, followed his advice and strived to study QC based on "*Genjitsu* and *Genba*", however, he kept me telling "You pursued only theories" without admitting my endeavor. In retrospect, he was grounding me thoroughly in QC. I think it was his special way to help and nurture younger generation. I can also say that it was an expression of his love for us.

[†] Genjitsu: actual reality

^{††} Genba: actual workplace

In autumn of 1980, I received a phone call from him, and then I became a member of the Nuclear Power Plant Quality Assurance Review Committee established by the Ministry of International Trade and Industry. The committee was founded in response to the TMI nuclear power plant accident to re-examine the quality assurance systems of nuclear power plants in Japan.

Prof. Ishikawa made significant proposals as the chair of this important committee with a very clear concept and opinions based on his previous achievement in the field of quality control in Japan. He was teaching these concept and opinions with his perceptive senses and strong convictions. We learned numerous lessons from him.

(Professor Emeritus, Tokyo Institute of Technology)

Note: TMI nuclear power plant accident: A nuclear power plant accident that occurred in March 1979 on Three Mile Island in the U.S.

A Scholar of Action Who Could Get Down to Work on Production Problems

Kenzo Sasaoka

If we had not met Prof. Ishikawa, our company might not have won the Deming Prize for TQC, and the path I took as a corporate manager might have been considerably different.

I used to read and discuss, taking turns with executives of subsidiary companies, Prof. Ishikawa's *Introduction to Quality Control*, while on the other hand, I was struggling to reduce the number of defects of the products of which I was in charge. In 1972, I was ordered to temporarily transfer from Yokogawa Electric Corporation to YHP. After the relocation, I became involved in the issue of the quality of computers and other state-of-the-art electronics products. It was around 1975, the year Dr. Joseph M. Juran pointed out as the year when the level of the quality of Japanese industrial products and that of U.S. industrial products reversed. Thus, thanks to a strange quirk of fate, I met Prof. Ishikawa in person, whom I had known by his books only.

Through the "QC diagnosis" in 1976 and "Special Course for Executives" in 1977, I could be directly acquainted with the rich experience of the Professor, the action to set foot in the industrial spot even a scholar, and the management philosophy that can be regarded as something stemming from his patriotism. Prof. Ishikawa's enthusiasm and consideration but compassionate personality made me think: "The professor has been worried about us and has worked hard, but we, our company person, are not..." Especially Professor Ishikawa established and fostered "QC Circle" and he gave his devotion to the workers at the work site, which stemmed from his warm-hearted humanity beyond he came of a good family and was a professor of the University of Tokyo.

In gratitude for TQC established by Prof. Ishikawa, we believe that we have come to understand the value of quality, activated management, made our employees proud, and made a global contribution.

Prof. Ishikawa, we are truly grateful that we met you. Please watch over Japan and the world in heaven.

(President, Yokogawa-Hewlett-Packard)

A Postcard

Ms. Kaoru Shimoyamada

One day almost at the end of the year 1961, I received a postcard. When I discovered who wrote it, I was really surprised. It was a postcard from Dr. Ishikawa, written in his slender handwriting. I was greatly impressed by the fact that Dr. Ishikawa wrote a postcard to a Komatsu employee who had only about three years of service.

Around that time, Komatsu began a company-wide activity: "Project A," in which we began implementing Dr. Ishikawa's quality control method, in order to survive. Additionally, quality control education also began. On this occasion, I took the 21st Basic Course in Osaka and our group worked on the theme of reducing grinding stock removal of bushes which link track shoes. The result was selected to be reported in the *Hinshitsu Kanri* (Statistical Quality Control). As I had sent the results and the article to the editorial committee, I received the message from Dr. Ishikawa in that postcard.

In his comment, he suggested that I put in the conclusion of how much the processing cost was lowered by reducing the grinding stock removal.

He told me that the quality control has an effect not only on improving quality but also on reducing costs, which made my core stance when dealing with quality control.

Dr. Ishikawa was not just a professor but was well-versed in how a corporate system should be operated. This was always shown in his teaching. If he had uncertain things in regards to his mentoring, he always asked us to bring documents and reports that we used daily. I believe that today's successful results in quality control implemented in corporate entities depend largely on such his guidance.

Later, I had an opportunity to join the QC study missions of ICQC held in Venice in 1975, which was led by Dr. Ishikawa. Also in 1979, I traveled with him when we asked him to lecture at a QC seminar held in the former Soviet Union.

I remember him saying regrettably that even though we taught QC in the Soviet Union, the concepts would not spread throughout the whole company but only in the particular departments. I wonder how he would see this county today.

(Executive Managing Director, Komatsu Career Create)

"Don't Forget the Objective and its Implementation"

Hiroshi Odajima

"Revolution or renovation, which would you choose?... It does not matter whichever you take. The point is that the implementation is important." The venue for the Quality Control Symposium at Hakone Kowakien instantly fell silent after the Professor's hoarse voice (sorry for the expression). His comment was made from my question to Professor Ikezawa's statement, "TQC is an Idea Revolution".

At the time when the company decided to introduce TQC, which was not known well among industrial circles, many within the company were stubborn and stiff-necked. Therefore I fully understood and agreed with Professor Ikezawa's opinion that, unless it was promoted with the strong idea of its wording as "revolution", it was almost impossible for them to understand the concept of TQC.

In fact, when many companies introduced TQC there were only few TQC followers, but many anti-TQC sects instead. My opinion was that, to explain TQC with the expression "the Idea Revolution" would be too excessive for them, but that would be more appropriate to say "an Idea Reform" or "an Idea Renovation" ... Although I can say, if I were to exaggerate myself, that the Constitution guarantees protection of the freedom of thought, I was hesitant to use the word "revolution" in a company, as it could indicate drastic changes such as replacing superiors and bosses.

After some conversation with Professor Ikezawa, he said "The term 'an Idea Revolution' was from the Professor Ishikawa's idea and he has been explaining it for 30 years. I would like to ask for his opinion as the Professor attends today," and the above remark of Professor Ishikawa was so made.

Then it flashed on me that Professor Ishikawa's thought was of "strategic

orientation." He hinted that the importance was to achieve the objectives and not the means, and that if flexibility were to be neglected from the measures, in other words if you stick to means it is impossible to achieve objectives; in addition that the application is important. I think he admonished us against selfish actions by sticking to means and forgetting the objectives.

It has been 35 years since I first read the Professor's *Introduction to Quality Control* to learn quality control, and 20 years since I have received his instructions in person. I was with him for the last time in his lecture tour of the Quality Month in Okinawa, and I had a role of the opening lecturer of the conference which became my unforgettable memory. I cannot forget his warm face when he said, "Mr. Odajima, objectives and practices are important things."

(Director, Ricoh)