



THE UNIVERSITY OF BUCKINGHAM

Benzaemon Inoue, Sumitomo Electric and the Origins of Quality Circles

QMOD 23rd August 2018 Cardiff

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Agenda

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- **Aims of the Article**
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Aim of the Article

The main of this paper is to examine the contribution of Benzaemon Inoue and Sumitomo Electric Industries (SEI) in the early development of what came to be known as quality control (QC) circles.

The aim is achieved through the analysis and interpretation of archival records including journals, books, documents such as the SEI Deming prize-winning submission of 1962 and private letters sent by Benzaemon Inoue to the author Kenneth Hopper.



Overview of Methods

- This article uses archival business history methods to achieve the aims.
- The interpretation was adopted from a critical realist perspective

Analysis of the Archival data

- The letters were printed, ordered by date then coded for relevance

Article Type

- Analytic historical narrative describing such elements as contextualisation, causation, events and concepts



Benzaemon Inoue and Kenneth Hopper





Introduction to Benzaemon Inoue

1906

- Born in Kyoto

1930

- Graduated Electrical Engineering Department of Tokyo University and joined Sumitomo Electric (SEI) as an Electrical Engineer

1949

- He was an assistant manager of the Osaka works.

1963

- Transferred to Sumitomo Rubber Industries (SRI) after winning the Deming prize for SEI in 1962

1964

- Became President of SRI

1969

- Then Chairman

1979

- And finally Counsellor to the company



Inoue's Letters to Kenneth Hopper

The First Introduction

- 1979 Kenneth Hopper was introduced to Inoue through Peter Drucker. Drucker knew Charles Protzman who co-authored the Civil Communications Sector (CCS) course and Takeo Kato from Mitsubishi Electric

The Duration of the Letters

- The letters between Hopper and Inoue start in 1979 and continue to 1985
- Available online at Drucker Institute at Claremont Graduate University, Claremont, CA

The Starting Point for the Questions

- The end of world war two and the American initiatives in training the Japanese

Hoppers Questions

- Most of the letters are Hopper asking questions of Inoue related to SEI's adoption of the CCS course and how SEI started QC Circles

Inoue's Replies

- Inoue does not answer every question, but gives very important insights, which are used in this article

SUMITOMO RUBBER INDUSTRIES, LTD.

1-1, Tsutsumi-cho, Ichome, Fukuoka,
F.O. Box 345 Kobe Port,
Kobe, 631-01 Japan.

Mr. K. Hopper
3 Reese Ave.
Hackensack, New Jersey 07640
U. S. A.

May 9, 1980

Dear Mr. Hopper:

I would like to set forth hereunder the thoughts that crossed my mind from reading your essay published in the Dec. 9, 1979 issue of The Japan Times and also to reply to your letter of March 26.

1. You emphasized in your essay the importance of having teaching and learning go together. But the Japanese, even today, remain far more interested in learning than in teaching. The Japan Productivity Centre, the Japan Management Association and other business organizations are still sending numerous research and study teams abroad to Europe and America each year. Whereas, in contrast, there are only very few cases of management study teams coming to Japan from other advanced countries or from developing countries where the need to learn is greater. China stands out as the lone exception. The Chinese are dispatching study teams to Japan after another in all areas of management and they are intensely keen on learning Japanese practices.

Although Japan has grown into an economic power and Japanese management has come to be highly evaluated by other advanced countries, the Japanese are still endeavoring without let-up to learn from other advanced countries. This I believe stems from a traditional and deep-rooted inferiority complex that many Japanese harbor toward westerners. As you must have seen for yourself during last year's month-long visit to Japan, the situation here is such that names in English are being preferred in many cases not only as a brand name for goods of all description but even in corporate names as well. A subconscious feeling that people who speak English freely are of a race superior to their own is what after all leads the Japanese to feel that they must still continue to learn from the west.

But whatever the reason, it surely is a good thing that the Japanese remain eager to learn from other countries. For I believe that when one stops learning, whether he be an individual or a nation, the life and progress of that person also stops at the same time.

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2. Nevertheless, I too feel as you do that it is time for Japan to take on a more active teaching role and I fully agree with the suggestions you make on Japan as teacher. But first, there are two things that I would like to point out in this connection.

2-1. What Japan as teacher should do first of all:

Japanese management, in my opinion, requires much more systematizing. American management has been exceptionally well systematized from quite a long while ago. I think the most important factor which enabled many Japanese managers to learn about American management at the CCS Management Forum 30 years ago, and use it as a foundation on which to develop Japanese management, was that American management had been systematized into a form that made it extremely easy to learn. Mr. Protzman and Mr. Sarason were both very successful as leaders of the CCS Management Forum, but they were neither professors nor members of top management. The tremendous success these two achieved was due, of course, to their extraordinary devotion and hard work, but I believe that considerable credit must also be given to the fact that American management had been systematized into a specific form that was easy to learn and easy to teach.

I regret to say that there is as yet no book published in Japan that could be regarded as being on "This is what Japanese management is all about".

For a foreigner wishing to study Japanese management, there is no other way to go about it than to visit various Japanese companies, like you did last year, to get a first-hand account of how they operate; obtain interviews with well-known Japanese business managers and executives; then put all this together in his mind and come up with what he conceives to be "This is what Japanese management must be all about".

Having established in my own way systematizing of Japanese management to a certain extent, I had hoped to tell you all about it at Sumitomo Electric during your first day in Osaka last year, but regret very much that our discussion had to be so abruptly terminated after just about an hour as I was suddenly taken ill.

However, as I am not a scholar, my version of Japanese management does not go beyond the confines of practical business affairs, and there is no academic backing to it. So in the belief that work on systematizing Japanese management is one which calls for cooperation between Japanese scholars and business managers, I am thinking of making such a proposal to one of the appropriate societies concerned.

2-2. My request to foreigners who plan to study Japanese management:

In order to study American management, Japanese managers began by first acquiring some practical knowledge of the English language

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and then proceeded to studying American management in English. We have visited America several times and have managed on those occasions to hold discussions with Americans on management matters without benefit of interpreters.

In the same way, I believe that foreigners who wish to study Japanese management should first of all undertake a study of the Japanese language. It is an extremely difficult matter for the Japanese to try to teach the essence of Japanese management in English.

In his book "Japan as No. 1" which I recommended you should read before coming out to Japan last year, Ezra Vogel says in the preface that for two years he and his wife talked in Japanese and studied by immersing themselves in Japanese life. This I consider is very significant.

There is on the board of Sumitomo Rubber a British vice president dispatched from Dunlop UK. He has been stationed here with his family for several years, but it is a mystery to me why he doesn't take the trouble to study Japanese. He is in an ideal position to learn first-hand about Japanese management from Japanese personnel whose management results are seen to be far better than those of UK. Yet he is not taking advantage of this opportunity, and I really don't know why.

Perhaps it is because there are so few people in western countries who consider, like yourself, that Japanese management is worth studying. Then again, as I mentioned earlier about the Japanese having an inferiority complex toward westerners, it could be that a large majority of western people even today have a superiority complex vis-a-vis the Japanese.

I shall now reply to your letter of March 26.

On question 1: As asking a certain university professor for his agreement. I will give you his name and address upon receipt of his approval.

On question 2: Mr. I. Sakamoto, Chairman, Sumitomo Electric

On question 3: Please feel free to ask me any questions you may have on Japanese management, not just a few, but many will do.

If it is not possible to do so this year, then please come to Japan again next year, as personal talks will certainly be much more fruitful than corresponding by letter.

Please convey my warmest regards to Mrs. Hopper.

Sincerely,
B. Inoue



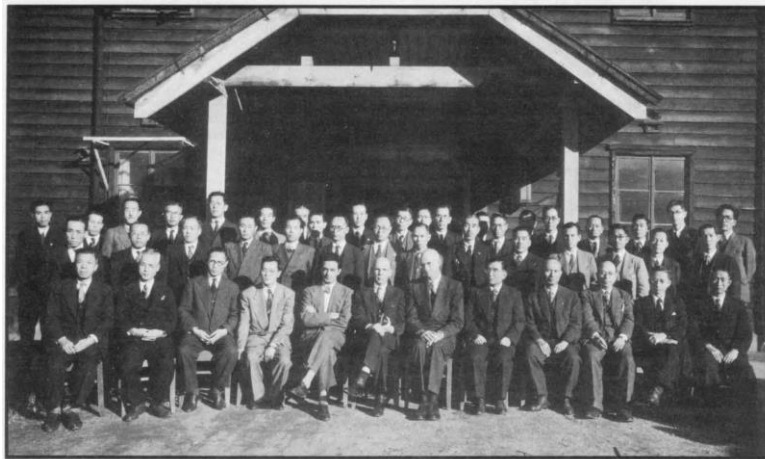
Contextualisation of Events Discussed in Inoue's Letters

Japanese Industrial Output was severely curtailed at the end of the war

The American occupying force needed communication equipment to issue instructions to the Japanese to maintain control

Japanese quality was poor and manufacturing methods dated so SCAPHQ authorised a training course called the CCS

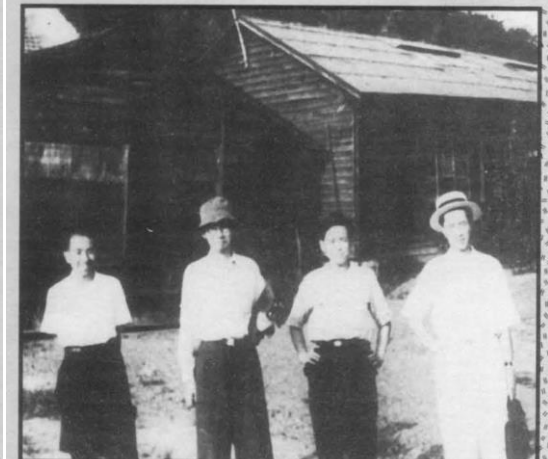
The CCS course methods were based on Scientific Management including Statistical Process Control (SPC) Inoue became a key participant in the CCS course



CCS Seminar Group, Osaka, Nov. 21, 1949, to Jan. 20, 1950. In the front row are B. Inoue, Sarasohn, Polkinghorn, and Protzman (respectively, third, fifth, sixth, and seventh from left). M. Matsushita, present chairman of Matsushita Electric, is fourth from left, second row. Other members of the Osaka group included top executives from Matsushita, Sanyo, Sharp, Toshiba, and Sumitomo Electric, or their predecessor companies.



Protzman lecturing to the Tokyo group of top managers in Waseda University. The seminar ran from Sept. 26 to Nov. 18, 1949. The group included executives from Fujitsu, Furukawa, Hitachi, Mitsubishi Electric, N.E.C., and Toshiba, or their predecessor companies.



Sarasohn remembers visiting Tokyo Telecommunications. He thought they had potential and encouraged them; the company is now called SONY. A. Morita, honorary chairman of SONY, is second from left.



SEI Absorbs American Technology Transfer

SEI believed Japan lost the war due to inefficient management practices

- SEI themselves attempted to implement Scientific Management as early as 1945

America had two advantages in management practices

- The Americans knowledge of industrial management;
- American management methods, as taught in the CCS course, were systematised, which made them easy to teach and to learn

The CCS course Inoue believed was the right course at the right time

- SEI also were active in the MTP and TWI training courses

Quality management and changing the organisation structure

- Statistical process control of quality was introduced and Inoue changed the organisation to a line and staff structure learnt during the CCS course



Inoue credits three reasons why SEI was successful in driving improvements based on suggestion systems and participation

The Tokugawa Shogun legacy and its relation to a line and staff organisational structure

Inoue's view on collectiveness at SEI

The role of the foreman in SEI



The Tokugawa Shogun Legacy and its Relation to a Line and Staff Organisational Structure

Tokugawa Shogun as defining Japanese society into clans lead by Daimyo

Daimyo devolved power within strict guidelines

This Societal structure reminded Inoue of the “line and staff” organisation structure

Inoue argues it was therefore easy to implement a line and staff structure in SEI
Implication self-directing workers within clan policies

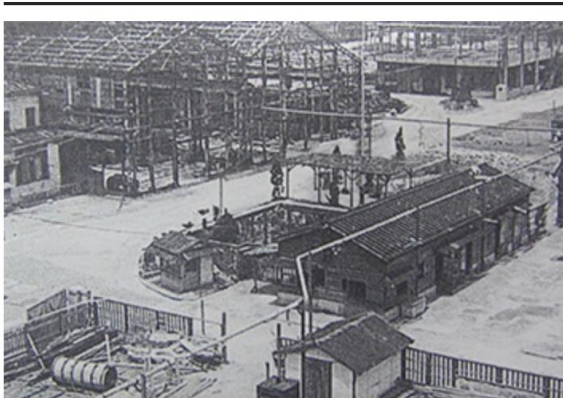
Suggestion systems worked well in this environment



Inoue's View on Japanese Collectiveness

- Inoue states this drove competition within SEI and against other companies to be better at implementing QC circles and having more suggestions
- However Inoue makes it clear that this may not have worked had SEI not implemented a line and staff organisation structure

Experienced four aerial bombings in
WWII



**Bird's-eye View of Itami Works from South West
(around 1952)**



The Role of the Foreman at SEI

Pre-1951 and the introduction of a line and staff organization

Personnel administration of his subordinates

Process control

Manufacturing technology

Maintenance and improvement of machinery

After 1951 Foremen freed up from administration

Training in SPC, TWI

Improvements in quality

Improvements in the manufacturing process



The 1962 Deming Prize Award

By 1957 SEI decided to apply for the Deming prize for quality

- Quality had significantly advanced
- Quality had become a major element of company policy
- The renowned Professor Yoshio Kondo was one of the judges.

Inoue big change taking away the inspection department

- Based on a suggestion from an unnamed colleague
- Inoue stated he was concerned Professor Kondo might object
- His concerns were unfounded

Professor Kondo refers to the SEI submission as “epoch making”

- SEI had implemented company wide Quality Control based on quality circles, not just in manufacturing
- The role of the line workers through participation driven by suggestion systems
- The removal of the inspection department and the reallocation of inspectors to the line

1962年度デミング賞実施賞受賞者報告講演要旨

住友電気工業株式会社

1. 会社概況

1.1 沿革

明治30年 4月 住友総本店の事業として住友伸銅場開設の際、その事業の一環として電線製造を開始。

同 44年 8月 住友電線製造所として分離独立。

大正 9年 12月 組織を株式会社に改め、株式会社住友電線製造所と称す。

昭和 6年 粉末合金製品の製造開始。

同 7年 特殊線の製造開始。

同 14年 11月 社名を住友電気工業株式会社と改む。

同 16年 3月 伊丹製作所開設。

同 18年 6月 名古屋製作所開設。なまこのころゴム工業製品の製造開始。

同 21年 1月 東京支店（現在の東京支社）、名古屋出張所（現在の名古屋支店）、福岡出張所（現在の福岡支店）を開設。

同 36年 5月 横浜製作所開設。

1.2 事業所

本社 大阪

支社 東京

支店 名古屋 福岡

工場 大阪 伊丹 名古屋 横浜



Finding 1

- SEI had a larger influence on the start of QC circles than currently believed

Finding 2

- SEI used societal conditions in Japanese businesses to develop quality control beyond the American teaching.

Finding 3

- SEI used the collectiveness found in Japanese culture, changed the organisational structure, which freed up the foremen to improve manufacturing processes

Finding 4

- The successful use of suggestion systems resulted in greater participation by the workers, which improved quality and processes faster



Questions