

The originator of cultured spherical pearls and the patent

William Saville-Kent and Tatsuhei Mise – Tokichi Nishikawa

The current problem in the original creator of spherical cultured pearls and the patent of spherical cultured pearls that is, the originator was British marine biologist William Saville-Kent but the patent holder was Japanese T Mise and T Nishikawa.

It is believed in Japan up to now that the original creator of cultured round pearls was T Mise and T Nishikawa who had the patent of cultured round pearls.

That is, Japanese concerning pearl industry was surprised to know the above announcement. I am also one of them and then I try to make an effort to clear this problem. Soon I found a paper written by one of Australian southsea pearl cultivator Mr. C. Denis George. I found that the George's paper was a first publication of this matter.

The preface of the introduction of George's paper on *The International Pearling Journal* titled 'DEBUNKING A WIDELY HELD JAPANESE MYTH' was as follows,

'Denis was sort of an Australian Don Quixote: most others thought him a crackpot. He was constantly railing against "the powers that be" in Australian pearling , primarily for selling out what he considered his country's heritage by allowing the Japanese to come in to supervise and essentially take over the pearl business in the early days of Australian SSP cultivation. One of his pet peeves – perhaps his major one – was the adulation given over to Messrs. Mise and Nishikawa for supposedly inventing the practice of round pearl cultivation. Denis spent an immense amount of time and energy (as you shall see) in promulgating that it was , in fact, an expatriate British marine biologist who was working in Australia at the turn of the 20th century who led these Japanese to the art of successfully inserting a spherical fragment of shell and a fragment of mantle tissue into a pearl "oyster" in order to derive a round pearl.'

George's paper 'The Background and History of the Early and Present Day Developments of the Cultivation of Pearl Shell and Pearls in the Indo –Pacific Region' was written in 1978.

Also he published 'The Cultured Pearl: Its History and Development', *Australian Gemologist*, June 1966-Jan.1967; *Lapidary Journal of America*, July to Sept. 1967. Two of his paper on the history and technique of cultivated pearls published by the *South Pacific Bulletin* (fourth quarters of 1968 and 1969). In his Report to the Government of Papua New Guinea and the FAO of the United Nations, "The Pearl", January 1978, he had referred to the Mise-Nishikawa controversy, extending due appreciation to Saville-Kent.

After I read George's Paper, I found many misunderstanding and discrepancy in his

paper. Then I would like to point out uncertainty and verify the individual matter to refer Japanese documents.

George was invited to Japan in 1960 to promote a business enterprise in association with K. Mikimoto Company. While in Japan investigating every aspect of their pearl industry, I was invited by Ise University to attend a pearl symposium organized by the pearl faculty in which all the leading pearl scientists, including the well-known Assist. Professor Dr. Seiji Wada of the Kagoshima University, would attend.

During the course of the discussion, I had mentioned that pearls were initially produced in Australia by William Saville-Kent sometime around 1890, and that he had established the first South Sea pearl farm at Albany Island in 1906.

First of all, to start on explanation, I thought he wrote the paper not to accompany material side by him because of making many mistakes.

There is not Ise University, the correct name is Mie University.

Regarding invitation by K. Mikimoto, he was not invited as a specialist of ssp cultivator.

On my investigation, he was invited as a mere Australian entrepreneur. At that time K. Mikimoto were planning to establish ssp cultivation in Australia, so that they were looking for an Australian kind of partner. Finally, while K. Mikimoto itself gave up the panning, one of their staff left Mikimoto and started ssp cultivation in Australia. The new ssp cultivation company was named Union Pearl Co., Ltd.

Re-pearl symposium, it seems to be small-scale Mie Univ. sponsored symposium, because there was not any record at Mie University and also Japanese Pearl Promotion Society. That is, it seemed the symposium was not big and somehow Mie Univ. private one.

George's conjecture kept at The Historical Society of Cairns, was that the Japanese really didn't invent round pearl cultivation, and his conjecture seemed to be a general theory in Australia and spread to western world.

The stepfather of T. Mise for many years was employed as senior inspector of the Japanese boats pearling in the Arafura Sea, the region west of Thursday Island enclosed between the Northern Territory and Indonesia, outside the three-mile territorial waters. Both of them were specifically sent by the Bureau of Fisheries to Thursday Island and remained there from the fall of 1901 to the spring 1902—a rather prolonged visit of five to six months for two such senior officers who actually had no official business to perform there.

According to Japanese documents, stepfather Mise was not an inspector and had not been employed many years by the Bureau of Fisheries. He was not an officer of Bureau and Nishikawa was a technician of the Bureau of Fisheries. Stepfather went to Western Australia not to Thursday Island. They did not go together to Australia. Mise went to Australia in 1894 and returned to Japan in 1896. Nishikawa went Australia in 1901 and returned in 1902, that is, 5 years after Mise's returned.

I confirmed stepfather's traveling document at the Diplomatic Record office of the Foreign Affairs and he got a pass-port in July 11th 1893.

At that period around 1894, I believe there was no work such as an inspector of mop shell fishing industry. Because mop shell fishing industry was controlled by Australian government, therefore there was no any work for control by Japanese government, that is, there was no existence of the work 'inspector' moreover 'senior inspector'. Why George made such a work?

According to Nishikawa's Australia traveling report, he did not stay TI so long, was there about 15 days. He continued travel to Sydney, Melbourne and New Zealand after TI during 6 months Australian traveling.

(Mise and Nishikawa) had never previously been involved with extensive background experimentation or research, nor presented evidence of such a continuation of work. ...

It appeared very peculiar that Nishikawa, an inexperienced youth freshly graduated from university and without any evidence of past extensive research, and Mise, a young ordinary village boy, carpenter by occupation without any past marine experience or scientific knowledge, suddenly achieved the discovery of an elusive biological function critical in the formation of pearl. ...

George did not understand the both of Japanese educational environment at that time.

Even they were not experienced about pearl cultivation for many years, Nishikawa studied biology at Tokyo University that was most progressed educational institution in Japan and he had studied and researched about biology under the world wide famous professors. Mise was a curious boy and was not a high educated person. But he studied and trained about pearls at the Mie Prefecture Fisheries Experimental Station. His living environment was good for pearl research and his home town was same as Kokichi Mikimoto.

(Apart from my paper; New Japan after Edo Era intended to expand an industry and an education. Government settled Fisheries Experimental Station in every prefecture for the purpose of research, education and development of fisheries as our country

being surrounded by sea.

Mr. Kikuo Otsuki, grandfather of Kyoichi Otsuki of Otsuki Pearl Co., Ltd. belonged to Ehime Pre. Fisheries Experimental Station after graduated Imperial Fisheries Institute-now University. He researched pearl cultivation at the Institution and he had some patents regarding pearl cultivation. He resigned Institution and established own pearl cultivation company in 1930.)

The Japanese had every reason to be technically informed on the Australian developments. There is no doubt that Japanese Bureau of Fisheries, through the Japanese population on Thursday Island, the Consulate in Townsville and Foreign Office in Tokyo, was informed of the Australian developments and Nishikawa and the old pearling inspector to proceed to Thursday Island to investigate the situation.

T. Nishikawa had never admitted that he had carried out pearl investigations or had ever met with Saville-Kent while he was in Thursday Island. ...

It would not be conjecture to state that Nishikawa and Mise (through his stepfather) had granted the secret knowledge of the principle of pearl technique from someone else. This could only have been Saville-Kent or perhaps other Australian oysterman following his steps.

This conjecture seemed to be only his imagination. While Saville-Kent researched how to make round pearl, it seemed that he never disclosed his research and technique. Regarding Saville-Kent would meet with Nishikawa in TI, it was impossible to do. Because, when Nishikawa stayed in TI for about 15 days, Saville-Kent was in England. (referring to A.J. Harrison, Savant of the Australian Seas)

Regarding pearl cultivating technique, it is difficult to understand the method just to see the operator's movement how to manage nucleus and mantle tissue into an oyster for making round pearl. That is impossible to steal the round pearl operation technique. But in regard to half pearl making technique, almost everyone understands the operation technique how to manage if one sees the operating movement.

I think it seemed that George described half pearl cultivation technique.

I have yet to see an original publication based on the research and the work of author himself, who has disputed the Japanese view. However, surprising information of fundamental importance was published by Mrs. Joan Young Dickinson in The Book of Pearls, 1968. "... they both had knowledge of Australian oystermen and their work

with oysters: Mise through his stepfather, who as a government inspector of oyster... It seems possible that at the turn of the century an unsung Australian oysterman hit accidentally upon the method Mikimoto had sought for so many years and passed his secret along unwittingly to these two brilliant young Japanese.

It seemed that she obviously confused round pearl cultivation with that of half pearl. Regarding Mise's stepfather's occupation, judging from Japanese material, he was an ordinary citizen and went to Western Australia to be an oysterman and also to research mop shell fishing industry. To examine his status on English written material, whereas he was an ordinary citizen, it was indicated like as follows:

*many years was employed as senior inspector of Japanese boats pearling-George
government inspector of oyster-Mrs. Dickinson*

*senior inspector of Japanese pearling vessel in Arafura Sea-A J Harrison
oyster inspection trip to Australia-Dr. Alvin Cahn of GHQ*

As above mentioned, there was no work of shell Japanese inspector at that time.

Nishikawa's discovery of making round pearl was 8 years before that he presented an application for patent office.

Not only George but also we felt curiosity why there was such an affair. Nishikawa and his party mentioned the reason why they applied patent backdated 8 years. They mentioned the reason why it was occurred. And at that time in Japan, the patent system was a 'first to invent'. As a reference, Australian system was a 'first to file'.

Conclusion

Recently the above mentioned topic was occurred by a pearl dealer's explanation of south sea pearls. It was said the original material came from American Museum of Natural History. Researching this matter I acknowledged that whereas the patent of round pearl cultivation was held by Japanese, it was believed in overseas the originator of the round pearl cultivation was a British marine biologist named William Saville-Kent.

In spite of Denis George's paper was published, I was not sure that Japanese pearl world acknowledged the fact or not. Anyway they had not any action against his paper up to now. Even if Japanese pearl people neglect George's paper as a trifle story, they should comment about this matter for the pearl world as his paper was presented to the public organization and confirm by their side the actual pearl cultivation history if they feel uncomfortable to this matter.