



INDUSTRY NOTES AND REPORTS

Cultured pearls in the 21st Century: A free market and new looks

Russell Shor¹

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The cultured pearl industry has experienced a dramatic transformation during the past 15 years, from a single commodity dominated by one country to a multi-colored array of goods and an ever-expanding group of producers (Fig. 1).

The Fall 2007 issue of *Gems & Gemology* (p. 200–226) offered an in-depth look at these changes and how they have transformed pearls into a must-have fashion item.

Japanese dealers relinquish control

For many decades after pioneering the cultured pearl in the early twentieth century, Japanese companies maintained tight control over its technology, production and distribution (Fig. 2). In the 1960s, however, large, white South Sea cultured pearls from Australia and black cultured pearls from French Polynesia began entering the market alongside the traditional white Japanese akoya.



Figure 1. Recent years have seen dramatic changes in the types of cultured pearls and their sources, with (top to bottom) Tahitian, Chinese, South Sea, and Japanese akoya (bottom two rows) goods represented here. Tahitian earrings courtesy of Mastoloni; South Sea strand courtesy of The Collector Fine Jewelry (Photo: Harold & Erica Van Pelt).



Figure 2. Japanese technicians controlled the art of grafting beads into mollusks for many years and in many different localities (Photo: Russell Shor).

1. GIA Senior Industry Analyst

The French Polynesians initially struggled to gain acceptance for their products, as many believed they were treated-color. A breakthrough came in the early 1970s when GIA researcher Robert Crowning-shield determined their black color was indeed natural. Meanwhile, the South Sea cultured pearl was becoming a branded fashion item, though the Australians still marketed their output solely through Japanese wholesalers.

The real changes began in the 1990s, when the nearly century-long grip of the Japanese loosened due to a combination of factors: aggressive marketing efforts for South Sea and black French Polynesian pearls; the rise of lower-cost, fine-quality Chinese freshwater cultured pearls (Fig. 3); and the outbreak of a disease that devastated much of Japan's pearling industry.

The Australians and the French Polynesians (now selling under the "Tahitian" banner) began marketing their products as distinct from Japanese akoyas: the South Sea goods as luxury items that were not subjected to treatments, the Tahitians as exotic fashion pieces. Producers of both types of cultured pearls embarked on multi-million-dollar consumer campaigns to promote their goods and the images they wanted them to convey.

By the mid-1990s, Chinese farmers, who for years had produced small, irregularly shaped and very inexpensive goods (dubbed "rice krispie pearls"), were successfully growing round, akoya-like cultured pearls.

The quantity of Chinese goods entering the market threatened to inundate Japanese distributors. The Japanese entered talks with the Chinese government in an effort to control production and exports of such goods, but they failed on both fronts.

Then, in 1996, reports began filtering in that Japanese pearl farms were suffering the massive mortality of their oyster crops. By year's end, an estimated two-thirds of the akoya oysters under cultivation in Japanese waters had died from infectious disease — a blow from which that country's cultured pearl industry has not yet fully recovered. As a result, Japanese producers no longer had the financial resources to control supplies and distribution, thus creating a true free market within the industry.

Market instability meets fashion revolution

The first test of the new free market came at the end of the decade, when the large amounts of Chinese goods depressed prices for some categories and the production of Tahitian black cultured pearls skyrocketed with little control over quality. Prices for lower-quality black cultured pearls in particular plummeted, a situation that took several years to reverse as the French Polynesian government imposed stricter controls on exports. The Japanese attempted to move akoyas more up-market by concentrating on larger sizes, while the South Sea producers increased their luxury marketing and advertising campaigns.

At the same time, cultured pearls in pastel shades of green, violet, pink and blue began showing up in designer pieces in the late 1990s, while a producer in the Philippines launched a marketing campaign for gold-colored goods. Within the past few years, "chocolate pearls" have become a fashion item. Once rejected by pearl producers and distributors who thought only in terms of black and white, such fancy-colored cultured pearls started a fashion revolution that still continues.

As some of the world's top designers began working with cultured pearls and the major producers



Figure 3. Mussels used by Chinese culturers can produce dozens of pearls at one time (Photo: Doug Fiske).

increased their spending on branding and advertising (Fig. 4), large retailers took a much greater interest. Indeed, Tiffany & Co. created an entire chain of retail stores (Iridesse) based on pearl jewelry, because they could now offer a diverse array of products across a very broad price range.

In the future, the success of these many ventures will undoubtedly attract new enterprises in other nations, particularly around the Pacific Rim — but also in Mexico and the Middle East — while existing producers will continue to experiment with new products. Recently, one designer partnered with a Vietnamese farm to culture black pearls around gemstone bead nuclei.

Identifying treatments will remain a challenge, and retailers and consumers alike must beware of the many techniques that can be used to enhance the appearance of cultured pearls, especially irradiation and dyeing, and the methods that can be used to identify them.



Figure 4. Cultured pearls have become a favorite of jewelry designers worldwide. This suite (8–11 mm) by Mari Saki of Nagahori Corp., Tokyo, was a 2006 winner of the Perles de Tahiti design competition. Courtesy of GIE Perles de Tahiti.

Abstracts from the 4th International Gemological Symposium Fall 2006

The challenges and opportunities of growing and marketing South Sea cultured pearls

Nicholas Paspaley, AC

Over the last 50 years, the cultured pearl industry has undergone a significant transformation. It has changed from a period when Japanese and (later) South Sea cultured pearls were effectively the only cultured pearls in the marketplace to the situation today, where there are a large variety of cultured pearls available from many different localities and of many different types.

In the pre-culturing era, all oceanic (saltwater) pearls were classified as Oriental pearls and South Sea pearls fell into this generic category. With the advent of pearl culturing, however, pearls became more accurately known for the type of oyster that produced them and the region in which those oysters grew — hence the term *South Sea pearls*.

Naturally occurring pearls from the *Pinctada maxima* oyster native to the South Seas have been traded for thousands of years. But in past centuries, many natural South Sea pearls were undoubtedly traded simply as Gulf pearls. Because of its spectacular nacre, the South Sea pearl oyster historically has produced some of the most significant natural pearls in the world. Therefore, it follows that this oyster has the ability to produce magnificent cultured pearls as well.

However, the competition for market share between gem producers as well as between different pearl types is fierce. At the same time, there are significant gaps in the expertise required to grow pearl oysters and conduct pearl farming compared to many other fields of knowledge. There are very few experts today who have a broad knowledge on a comprehensive range of pearl and pearl farming issues.

The challenge for the South Sea cultured pearl industry today is twofold: to produce pearls of a superior quality, on the basis of which they can be differentiated in the wider pearl market, and to improve the level of knowledge and understanding of pearls in the market place.

Chinese freshwater cultured pearl evolution

Joel Schechter

Seven years ago, we presented “Chinese Freshwater Cultured Pearl Revolution” at the last GIA symposium. In a very controversial session, we predicted the enormous impact China would have on the pearl markets.

Nearly a decade later, the entire industry has changed. Huge quantities of affordable cultured pearls now are harvested annually — by conservative estimates, more than 1,200 tons of freshwater cultured pearls were harvested in 2005 — putting pressure on other pearl-producing countries. The pearl industry is now in a Darwinian “survival of the fittest” mode. Rounder and brighter cultured pearls from China (Fig. 2) have totally altered Japan’s previous dominance as the major pearl power. Large sizes are beginning to affect the South Sea markets. Even golden and Tahitian pearls are not immune to China’s fury, as improved color enhancements allow freshwater cultured pearls to mimic colors from all over the globe.

What does the future look like for the next decade? With 11–14 mm bead-nucleated freshwater pearls beginning to show up in the marketplace, China appears to be taking even sharper aim at South Sea producers. And while the quantities harvested in China continue to rise, can anything be done to support pricing? Are more affordable cultured pearls a good thing for the market as a whole?

Interestingly, China’s exports are rising dramatically, but total revenues have not kept up. Falling prices have badly hurt many of the growers, creating a “sell it before it drops further” mentality. All this continues to put financial pressure on the country’s market. While China produces 95% of the world’s cultured pearls, pearl associations estimate it keeps only about 8% of the revenue they ultimately generate — an amazing statistic.

To keep prices up, China needs to tackle the issues surrounding the low image of its cultured pearls. Better processing, improved marketing and elimination of low-end products are vital to support higher values for the market.

The Tahitian cultured pearl

Robert Wan

The Tahitian cultured pearl industry is the second largest industry in French Polynesia and the primary source of foreign currency from direct exports. It has a major socio-cultural and economic impact on the nation. With more than 7,000 Polynesians earning their livelihood within the pearl industry, it is an integral part of the fabric of Polynesian life.

The meteoric popularity of the Tahitian cultured pearl in the 1980s triggered a veritable boom in the industry. For many years, this market demand made pearl farming a lucrative endeavour, but the industry reached its saturation point in the year 2000. Flagrant overproduction and slack quality control, combined with a slowdown of the world economy, dealt the Tahitian pearl industry a serious setback. Suddenly, pearl farming was no longer a viable activity.

According to the official figures from the French Polynesian Pearl Culture Bureau, this glut caused many pearl farms to close and others to consolidate. In only seven years, the number of pearl farming operations decreased from 2,700 registered in 1998 to only 800 remaining in activity at the end of 2005 — half of them shell producers, the other half pearl producers.

Drastic measures had to be taken to ensure a stable production and a quality standard for the Tahitian cultured pearl. Consequently, the French Polynesian Government established the Pearl Culture Bureau in 2001. This organization aimed to enforce strict quality controls and production regulations on the supply side of the spectrum. These included the following measures:

- Limit the number of pearl farming concessions
- Limit the number of production and export licenses
- Shut down pearl culturing activity in certain lagoons
- Establish a firm classification system aimed at ensuring that only high-quality product enters the world market
- Strictly control a minimum required nacre thickness in all exported cultured pearls
- Destroy all rejects to prevent their commercial use.

All these regulations combined with an effective marketing program, conducted by the non-profit GIE Perles de Tahiti, resulted in a marked increase in the total value of Tahitian cultured pearl exports of 14% in 2004 and 16% in 2005, accompanied by trading price increases of 30% from 2003 to 2004 and 20% from 2004 to 2005. Confidence has been restored to the market and production in 2006 has remained stable to date.

Maintaining the viability of Tahitian pearl culturing activity is the principal objective of Perles de Tahiti. The specific objectives include:

- Export cultured pearls and cultured pearl jewellery totalling \$200 million in 2012
- Limit the number of active producers on the island to 1,000
- Perpetuate the pearl-bearing oyster resources
- Improve the quality of production.

The future of the Tahitian pearl industry is critical to French Polynesia and its direction will dictate the future social, cultural and economic well being of the islands. Protection of the environment is a pivotal aspect of this. The life of a Polynesian and his family depend on his livelihood. The islands and their lagoons are our heritage and our future, worth every bit of our protection. Pearl culture is indeed a miracle of nature and of man. We must give back to nature what she has so graciously given us.

Branding cultured pearls: From a retail perspective

Meyer Hoffman

Over the years, the retail landscape has undergone many changes. Consumers have become savvier and more demanding, retailers have created an “environment” or buying experience to attract these sophisticated consumers, and manufacturers and suppliers have developed appealing “brands” to set themselves apart from the competition. The most prominent examples can be found in the apparel industry where leading fashion designers have truly captured the hearts and wallets of the high-end consumer with strong brand identities and distinct product assortments. More recently, apparel retailers have created their own brand significance by setting themselves apart from the high-end fashion world with innovative store concepts and individually developed product lines.

Critical factors

- Companies must clearly define and market their brand essence, strive for differentiation and target their audience with precision.
- Defining one’s brand essence can take many forms, but it must remain clear and consistent over time. There are many examples of established houses that have successfully reinvented themselves (Burberry) and well as newly created brands that are aggressively targeting Generations X and Y (Abercrombie and Fitch).
- Creating differentiation is crucial in today’s retail environment. There are too many look-alike products or generic copies that offer no value added and consequently are not appealing to an affluent audience. In today’s highly competitive marketplace where product life cycles are getting shorter, it is imperative that successful brands strive to create a point of difference.
- Finally, attracting a well-defined audience will ensure that companies achieve increasing sales and sustain a profitable business model. Generational marketing (including psychographic profiling) is one aspect of defining and attracting the most appropriate audience for your product.

Justin Hunter and Pearls Fiji

Source: Pearl World, The International Pearling Journal, volume 16, number 4 (December 2007)

Justin Hunter had a big dream. Why not, he thought, grow pearls that looked nothing like the traditional black pearl. Why not produce pearls in beautifully distinctive hues that are also larger than what are traditionally grown. So he came back home to Fiji from the United States to establish J. Hunter Pearls Fiji in 1999 where he implemented his bold new pearl farming techniques. Now, he is reaping the rewards of his innovative thinking... and his pearls are highly sought after for their uniqueness and their untraditional colors.

Justin’s dream did not end with growing the world’s best pearls. His goal was to blend pearl farming with Fiji’s natural environment and its indigenous people to create a working partnership. Justin is intensely committed to keeping the marine environment of Savusavu Bay in its pristine condition and to improving the lives of the people of the community.

J. Hunter Pearls Fiji provides much needed jobs for local people, which give them the resources to improve their villages and their lifestyles. Justin’s

commitment also includes providing school scholarships to deserving students and to be personally involved with the Savusavu community at large.

Before Kokichi Mikimoto discovered the technique of culturing pearls in the early 1900s, natural pearls were so rare and expensive that they were reserved for only the noble and very rich. But the technology of pearl culturing changed all that. These days, of course, most all pearls are cultured. That is to say, the hand of man enters into nature's realm to begin the process of making a pearl, then nature takes her course while the farmer continues aiding the process with specific oyster management. Today, Justin Hunter and his team of farmers and technicians are perfecting the pearl culturing process. Every step of the operation is carefully managed, with years spent refining the methods toward the ultimate goal of growing the perfect pearl. Everyone at J. Hunter Pearls Fiji is devoted to the creation of beautiful pearls, utilizing the uniquely colored oyster shells that grow naturally in Savusavu Bay, creating pearls that are exceptionally different from all others.

History of J. Hunter

J. Hunter Pearls Fiji was established in 1999 when Justin Hunter returned home to Fiji after he earned his marine biology degree and gained his aquaculture experience with Taylor Shellfish Inc., of the US.

Justin spent his childhood in the small township of Savusavu, and it was his goal to find a way to use his aquaculture expertise and live in his favorite place in the world: Fiji. Creating J. Hunter Pearls, along with his partners who are also his cousins from Taylor Shellfish Inc., has been a dream come true.

The company

J. Hunter Pearls Fiji is situated in Savusavu Town on the island of Vanua Levu in the north of Fiji, an area that's still largely untouched. This unspoiled location provides a truly unique location for aquaculture. The pearls are cultured in a natural environment that's largely free of impurities and pollution. The office and jewelry boutique is situated on Main Street in Savusavu Town, close to the wharf, while the pearl farm is just a short distance away on the bay. The founder, Justin Hunter, is an active community citizen who strives to protect and maintain Savusavu Bay's healthy marine environment. J. Hunter Pearls Fiji works closely with the traditional owners of the local fishing rights and provides much-needed jobs for the community, such as contracting work to women's groups to help the villagers improve their standard of living. The company also sponsors village improvements and provides a

school scholarship annually for deserving students. Justin is using his expertise in aquaculture toward innovative and carefully-managed pearl farming. His goal is to make J. Hunter Pearls known as the world's supplier of Fiji Pearls, beautiful pearls in colors not found anywhere else. In 2005, J. Hunter Pearls won the Unique Exporter of the Year award presented by the Fiji Trades and Investment Bureau, in the coveted Exporter of the Year category.

The pearls

J. Hunter Pearls are a tribute to their unique environment, and the singular expertise of those who graft and nurture them. As Justin himself told us: "I thought you might just like to look at what we are producing. We have some of the best multi-colored pearls being produced anywhere. The size of our pearls is also very good, averaging around 10.5 mm for the first seed. We are producing around 120 kilograms this year."

"As you can see, we are not trying to mass produce the same pearl over and over again in huge quantities (à la Tahiti). We are really trying to produce something different for which we will hopefully be able to eke out a small niche market. And we proudly guarantee these pearls to be totally natural — neither dyed, colored nor enhanced in any way. They are grown in the warm pristine waters of Savusavu Bay, on the island of Vanua Levu of northern Fiji, where the environment remains precisely as nature intended it."

These nutrient-rich waters feed the oysters so well that J. Hunter pearls have a nacre thickness averaging 1.6 mm, well above the established nacre thickness of other pearl growing countries. "Most of our crop (around 65%) now fits into the lighter shade of pearls. We believe that the oyster we cultivate (produced from our own hatchery) is a sub-species of the oyster that survives in the atoll," says Justin. "Our oysters have distinctively colored shells and pearls," continues Justin. "And, as you can see, the shells we have are striking and in return they produce pretty striking pearls that I am quite sure you have not seen the likes of, ever before".

Operations

According to Ben Ponia, Aquaculture Adviser of the Secretariat of the Pacific Community: "The J. Hunter Pearls label is quickly becoming an exclusive high quality product line for Fijian pearls. The farm success is the result of attention to a number of critical factors such as good business acumen, attention to marketing and consultation with local communities. "Under the managerial direction of Justin Hunter, the farm has approximately 500,000 oysters under cultivation and the pearl harvest grosses several million Fijian dollars per annum. "Upon arrival I viewed several crops that had just been harvested.

The pearls display the usual spectacular array of color which Fiji pearls are becoming renowned for". Amongst this crop some dark "chocolate" colored pearls were pointed out. "The quality of pearls is probably in part due to the expertise of Japanese technicians employed by the farm. These technicians also provide seeding services for other pearl farmers in the surrounding area. The J. Hunter operation is also expanding to another location.

"The pearl farm operates its own hatchery and routine spawning operations were underway during my visit. The Fiji oysters appear to have a high fecundity and large sized eggs, which could be related to the nutrient rich water quality environment of Savusavu Bay.

"The pearl oyster egg sizes and spawn quantities seem larger than what are normally obtained in the Pacific region, quite likely a result of the nutrient-rich waters, causing the oysters to have an unusually healthy gonadal condition.

"Whilst the hatchery is not large by commercial standards, it still has scope for expansion and could accommodate other species. "The farm also employs a University of the South Pacific graduate as its biologist to carry out ecological baseline studies, particularly water quality monitoring and carrying out basic pearl grow out experiments.

"The pearl farm provides direct benefits through avenues such as employment (of all genders and a range of ages) but also indirectly through the business that the high investment pearl farming enterprise generates. "The farm also pays a dividend from its profits to the local village. For example, it has provided funds for a community hall, which also serves as emergency shelter in case of hurricanes.

"In addition, the farm sponsors an education scholarship for young students from the village. Those interested to know more about the farm operations can visit their website: <http://www.pearlsfiji.com>.

"Whilst at the farm we discussed the possibility of carrying out some mabe-pearl seeding trials. The Hunter Pearl Farm has thousands of reject oysters that could be used for the experiments. It would be particularly interesting if the geographical scope for this experiment could be standardized and extended throughout the Pacific and other countries."

The product

Justin is also proud of the finished product in which his pearls ultimately appear:

"When setting our pearls, we showcase the singular beauty and uniqueness of each pearl. "Our ring and

pendant collections are inspired by the individual characteristics of our high quality pearls.

"All diamonds in our pieces are supplied in the VS1 to SI clarity categories and are H-I in color. "Our pearl necklaces and earrings are all hand-matched, with each piece being uniquely beautiful."

Fiji pastels

"When we first took our pearls to Japan in 2003, we could not, for the life of us, get anyone to purchase our Pastel/Fiji light pearls. "Now we get a premium price for our pastel pearls. Early on, though, most buyers that looked at our pearls initially said they were interesting but did not want to take the risk of supplying something completely new to the market... but we believed in both our product and with the concept of developing a new and exciting product, says Justin.

The auction

J. Hunter's Fiji Pearls Auction was held in Japan on June 15th, 2007. At this event were offered approximately 30,000 pearls in 89 lots with an average size of 11.5 mm. The biggest round pearl was 18 mm. Participants numbered 18 from countries such as Germany, Italy, Hong Kong, Japan, and several other locales. Seven were from Europe. Those in attendance delivered the following comments:

"The world pearl market has been longing for something new like Fiji pearls."

"We were amazed at the various colors of Fiji pearls, colors which we have never seen before."

"The strong luster impressed me a great deal."

"These were rare and larger pearls, compared with Tahitian pearls."

"I appreciate J. Hunter's farmer's concept."

Justin's comments

"Our unique marine environment and careful selection of oysters possessing rich color variation have produced these pearls that are in a class of their very own."

"Our vision is to continue the work we have started. We look to be champions of a new direction of pearl farming. We will look to challenge the current corporate style of systematic mass production of pearls and focus instead on producing high quality pearls.

"We will continue to work to provide truly unique pearls that represent Fiji."

"I have been very fortunate to have great people behind this venture that believed in what we were doing, and made this work.

"Our recent auction has given us the success we have been working so hard for".

Editor's note

A follow-up article in the most recent issue of *Pearl World* (October–December 2008) describes the second auction of pearls from J. Hunter Pearls Fiji in Yokohama earlier this year. It reports that 90% of lots were sold. There was particularly keen bidding for a 18.9 mm round pearl and for baroques in "earthy" colors which are in demand. The article also reported on expansion of J. Hunter Pearls activities to a second 250 ha farm site at Kioa in the northern group of Fiji. This farm site will greatly increase production in coming years.

Pearl auctions

Source: *Poe Vira Vira*, April 2008 (courtesy of *Jewellery News Asia*, April 2008)

The international pearl auctions held in February and March 2008 in Hong Kong concluded with good results, although buyers generally adopted a more cautious attitude amid worries over the slow moving US economy.

PASPALLEY: Commenting on prices, chairman of Kobe-based Hosei Co Ltd, Yoshihiro Shimuzi, noted that prices were stable for cleaner better quality merchandise that were in demand, but were softer for spotted or lower quality items. Leung Sik Wah, director of Hong Kong-based Cogent Trading Co Ltd, and co-organizer at the Paspaley auction commented that buyers adopted a "wait and see" attitude in the face of economic uncertainties. "Nobody knows what will happen in three to six months' time. Given the sub-prime issue and falling stock markets, buyers have become more cautious — buying just what they need and being less willing to stock up". The 38th Paspaley Pearl Auction, a three-day event, sold 148,769 pieces (420 kg) of white and golden South Sea pearls or 64% of the total on offer. Average price per pearl was USD 88.23. Buyers attendance was high (105) and Europeans topped the buyers list, thanks to the strong Euro. Large sizes and baroques captured the attention of buyers at the Paspaley Hong Kong auction. Several lots consisted of only one pearl, mostly 16 mm, and fetched high prices. The one with the highest per-gram price was a 16 mm (6.18 g) white pearl with pinkish overtones which sold for USD 4,137. Over 20 lots of baroques on offer were bid for strongly. Lot #552 containing nine baroques of 20 mm and above fetched USD 35,284.

ROBERT WAN: Marked price increases were reported at the 39th Robert Wan Tahiti Perles Auction, which fetched 3.89 million Euros, or USD 5.94 million for the 124,633 pearls (283.3 kg) sold at an average price per pearl of 31.04 Euros/USD 47.67. Robert Wan was very happy with the auction because not only was the price maintained, more pearls of better luster and better colours and more larger pearls were available. A larger quantity of 12–14 mm pearls were on offer.

Prices were considerably higher overall due to higher overall pearl quality, more bigger sizes and better sorting said Mr Shimuzi of Hosei. President of Wong's Diamond and Pearls Co Ltd in Hong Kong, Wong Yik Nin, estimated an average price increase of 10%. Buyer attendance was high with Japan remaining the top buying market followed by United States and Great Britain

POE RAVA NUI: The 8th Poe Rava Nui Tahiti Pearl Auction sold 77% of pearls on offer, with a total sale value of around 3 million Euros, or USD 4.6 million. The average size of the pearls on offer was about 1.4 g. Larger pearls of the 13 mm to 18 mm sizes received strong bids especially from buyers in Europe and the US.

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