

# FRENCH BEADMAKING: AN HISTORICAL PERSPECTIVE EMPHASIZING THE 19th AND 20th CENTURIES

Marie-José Opper and Howard Opper

*Beadmaking in France began in pre-Roman times. It reached its zenith in the 19th and 20th centuries when beads of sundry materials and styles were produced in both artisanal workshops and large factories to decorate a multitude of items and to serve as components of fashion jewelry. This article discusses the different beadmakers and their varied products.*

## EARLY FRENCH BEADMAKING

The oldest glass beads found in France come from the sites of megalithic monuments and bring to mind ancient Phoenician, Syrian and Egyptian beads. Phoenician merchants began trading glass beads with the local inhabitants at a time when the people of ancient France had not yet learned to work glass themselves. Artisanal glassmakers established themselves in pre-Roman Gaul, as attested by the tombstone of a Carthaginian glassworker discovered at Lyon (Barrelet 1954: 7). However, it was not until the Roman occupation that the Gauls learned the art of making glass beads. Combed and eye beads, reminiscent of more ancient styles, appeared during the Merovingian era (van der Sleen 1967: 54).

The manufacture of glass was widespread throughout France during the medieval period. Glass objects were sold by mercers or at local markets. Travelling salesmen also carried them, or they could be purchased directly from the manufacturer in several cities (Foy 1989: 378).

Precious stones were imitated in glass beginning in the 13th century (Barrelet 1954: 43), and Italian glassmakers brought their unique skills to France in the 16th century (Garnier 1886: 115). According to Le Vaillant de la Fieffe (1873), glass rods and *émaux*

*de verre* (opaque glass containing tin oxide) of rich, previously unknown colors appeared at this time.

Working principally with glass and bone, French beadmakers were known as *patenotriers*, and sold all kinds of rosaries and necklaces. Their work was recognized through written authorization from the king, accorded initially in 1569 (Garnier 1886: 143). Certain of the *patenotriers* prepared their own glass rods and *émaux de verre*, which they then formed into beads.

In the 17th and 18th centuries, glassworkers, *émailleurs* (lampworkers specializing in small glass objects; Fig. 1) and *patenotriers* established their sales offices in Paris on rue St. Denis in a building called *Le Renard Rouge* (The Red Fox) where they unloaded and sold their consignments. The *émailleurs* were known in particular for their manufacture of glass imitation pearls. In order to make them, they needed a semi-opaque material called *girasol* that came from Nevers, Neaufles Saint-Martin, Dangu in Normandy, Coudrecieux and Ferté-sur-Oise (Barrelet 1954: 119). In 1686, a Parisian beadmaker named Jacquin began using a nacreous material called *essence d'orient*, derived from the scales of the bleak (*Alburnis alburnis*), a European freshwater fish, for the same purpose (Garnier 1886: 107). These beads were referred to as *perles baroques*.

According to archival documentation, the *émailleurs* also made objects such as butterflies, flowers, and rural and religious scenes which were decorated with all kinds of glass beads (Barrelet 1954: 118). Garnier (1886: 336) refers to "Raux, glassmaker to the king and jewelry merchant, who sold diverse small glass objects including fine bead



Figure 1. *Émailleur* or lampworker; 18th-century engraving from Diderot's *Encyclopédie*.

necklaces and ear pendants on the rue St. Martin" in Paris.

Glass beads imitating emeralds, rubies, quartz, lapis lazuli and other precious stones were also very popular during the 18th century. Nicolas Mazzolao established a royal factory making imitation stones of all colors at Eauplet, near Rouen (Barrelet 1954: 120). Numerous Venetian glassworkers came to work in France after 1797, the date when Venice fell under the control of Napoleon. The Italian beadmaking industry subsided and the number of manufacturers was reduced (Marascutto-Stainer 1991: 64). Glass imitation diamonds were perfected by the German Strass who began working in Paris in the 1770s.

Most of the *émailleurs* and the *patenotriers* of the 18th century ordered the glass rods they needed from specialized glassmakers. Certain kinds of glass were only made at Nevers which exported them throughout France (Barrelet 1954: 119). Other producers of glass rods were Goutté at Chaillot, Lambert and Boyer at Sèvres and Oppenheim at Petit-Quevilly. Using these rods, the towns of Aubermesnil and Villers in Normandy became centers for the manufacture of common glass beads called *rocailles* (Barrelet 1954: 119). As was the case in the Middle Ages, these beads were still sold by mercers. Their role in the 18th century was one of an important corporation whose overall activities were analagous to those of modern department stores (Delpierre

1981: 29). In 1816, a Parisian glassmaker named J.A. Paris succeeded in imitating Venetian glass. He made ingots, rods and tubes of *émaux*, as well as millefiori paperweights.

## 19TH AND 20TH-CENTURY BEADMAKERS

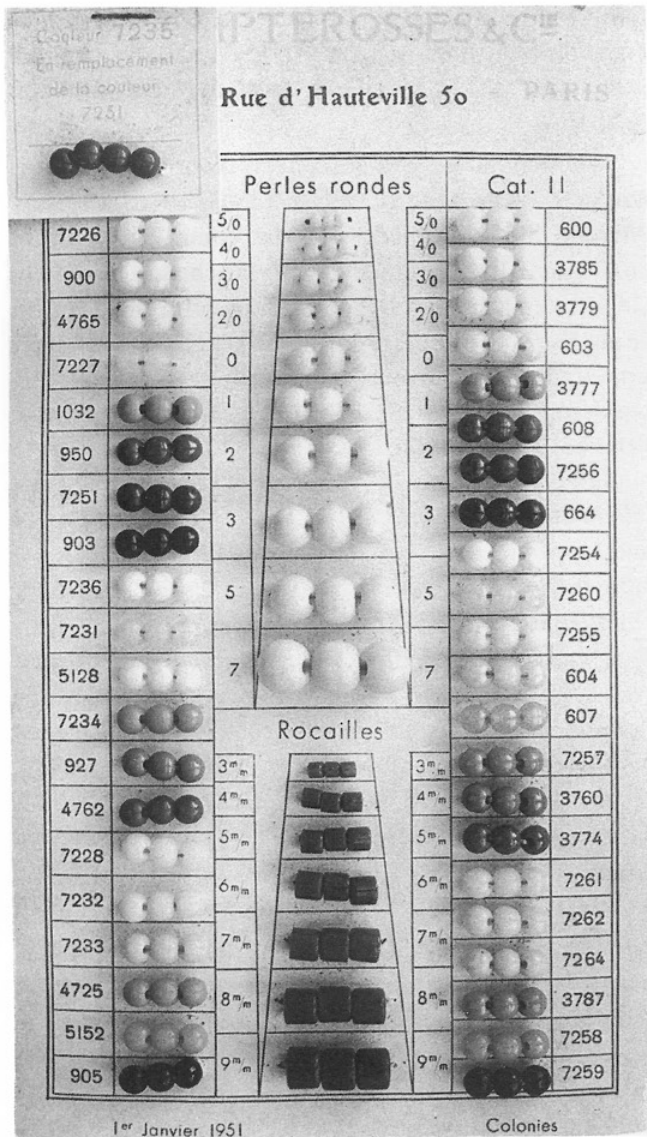
During the 19th and 20th centuries, the French produced beads of many different materials. The bulk of these, notably porcelain or "tile" beads, glass embroidery beads and probably most metal types, were made on a large scale in factories. Other more intricate beads were individually fashioned by artisans operating in workshops or at home.

### Porcelain Beads: The Bapterosses Company

The 19th century saw the appearance of a number of new techniques and materials for the production of beads. Among them was a machine that could make pressed beads quickly and in great quantities, thus making them a lucrative commodity.

Porcelain beads manufactured by the Bapterosses factory in Briare, France, were made according to a procedure known as the "Prosser process," first patented in 1840 by the Englishman Richard Prosser (Sprague 1982: 168). French inventor and entrepreneur J. Felix Bapterosses made significant improvements in the process, and his company had great success distributing porcelain beads from 1864 to 1973. The following information about the man and his process is condensed from a personal communication from Monsieur Jean Bessone (1991), a retired chief officer of the *Compagnie Francaise de l'Afrique de l'Ouest* (C.F.A.O.) which did business with Bapterosses from 1955 to 1973.

The Prosser process was used and improved upon by Bapterosses to the point that, in 1872, the U.S. Patent Office issued him a patent for "improvement in machines in making buttons, beads...." Two new inventions that helped to establish this industry were a powdery "paste" rendered slightly plastic by the addition of milk, and a special muffler furnace or enamel kiln. The new process and the new machine allowed for continuous operation under the direct supervision of a single technician. Before launching



**Figure 2.** Sample card of Bapterosses porcelain beads from 1951 (all photographs by the authors).

into the manufacture of beads, Briare concentrated on making porcelain buttons.

Bapterosses began producing beads in 1864. Already in 1871, variously colored porcelain beads were reported in the inventory of the *Buhan et Teisseire* trading company based in Dakar, Senegal. His success was such that, in a period of only 20 years, the number of workers making beads in the Briare region rose to 1500, and the population of the area increased from 2000 to 5000. Bapterosses beads rapidly took their place with glass beads as part of the

traditional stock of articles destined for international export (Fig. 2).

The essential difference between the production of porcelain and glass beads is that porcelain beads involve working with a cold ceramic paste that is molded to shape in presses before firing, whereas glass beads are made from glass initially worked in a molten state.

Molding the porcelain beads in presses, and then firing them in an oven involved a number of operations centering on the preparation of the paste. This was accomplished in the following manner. First, a proportioned mixture of three essential elements — feldspar, calcium fluoride and Fontainebleau sand — had to be prepared. The first two components had to be cleaned, crushed, dried, pulverized and sifted. The mixture was then fused at 1,400°C, cast into water, dried and stockpiled. This material, which resembles crushed glass, was called *calcine*. Next, this material was pulverized and sifted at which point it became known as *pâte*. Finally, a proportioned mixture of differently colored *pâtes* was combined with corrective oxides to produce desired colors during the final firing.

Bapterosses constructed his own generator for the production of electricity in his factory. Other facilities that allowed him to control all the different phases of production and distribution included a printshop, a shop for making containers, a woodlot that provided the primary material for making containers, and a dairy farm that provided the milk required for rendering the porcelain mixture plastic, as well as giving it a pure white color. In addition, Bapterosses established quality control laboratories for each basic product and for each phase of the manufacturing process.

As an adjunct to this autonomous local industry, Bapterosses established a town for the workers near the factory which included a school for the children of the employees, a hospital and church. Each family had its own garden. Bapterosses was also an active participant in the planning of the town offices and the local police force.

From 1955 to 1973, certain agreements allowed Bapterosses and the C.F.A.O. to collaborate very closely in the marketing of beads in West Africa. As the former company's business declined during this

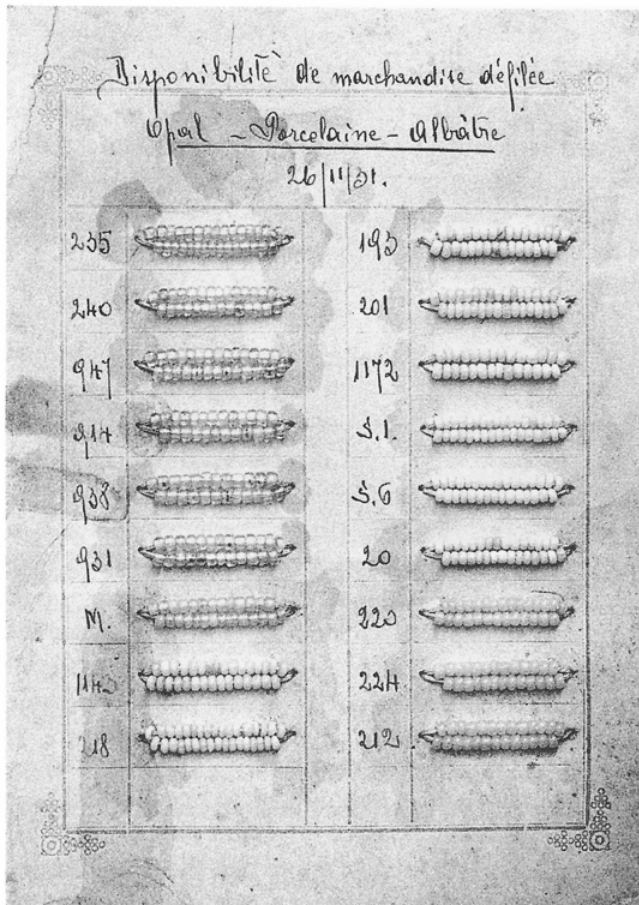


Figure 3. Bead sample card dated 1931 from *Etablissements Salvadori et Barbini* (collection of Anita Gumpert).

period, there was a forced reduction of personnel at Briare. As a consequence, the manufacture of beads (impossible to render automatic, thus demanding many workers) was considerably reduced. As a graphic example, 338 tons of Bapterosses beads were handled by the C.F.A.O. in 1959, whereas only 129 tons were sold in 1973. Today, manufacturing activities at Briare are under the control of an American group and center on mosaic tiles. Briare no longer makes beads.

### Glass Rocaille Beads: Etablissements Salvadori

Located at Vaulx-en-Velin, just a few kilometers from the major city of Lyon, *Etablissements Salvadori* manufactures *rocailles* (Fig. 3), a term that defies literal translation. More a category than a type of glass bead, *rocailles* include bugle, seed, pony and

crow beads that range from 1.5 mm to 7.0 mm in diameter. Anita Gumpert's (1990) article provides the basis for the following description of the Salvadori industry.

The Salvadoris are descended from Murano glass workers. The factory was established in 1929 by Alfredo Salvadori, and offered some 20 different colors and 10 different sizes of glass beads. Brothers Gérard and Michel Salvadori, along with their cousin Jean-Pierre, inherited the business from their grandfather and currently run the firm. Initially, this was one of several *rocaille* factories in France producing beads for the funeral trade. Other manufacturers included *Compagnie Française pour l'industrie des rocailles* at Chauny in northern France and *La perle idéale* in Paris (closed in 1946 and 1947, respectively), as well as *Société générale pour l'industrie de la verroterie* at Bron and *Établissements Maschio frères* at Villeurbanne in the Lyon suburbs. Although Francis (1988: 49) indicates that the two latter concerns are currently producing beads, they actually went out of business in 1958 and 1950, respectively (Gérard Salvadori 1992: pers. comm.). The fashion of adorning graves with flowers and wreaths made of seed beads mounted on wire (Figs. 4-5) lasted from the 1880s until around World War II.

Today, the Salvadoris export beads throughout the world, even to other countries that produce *rocailles*, such as India, where labor is much cheaper than in France. Extreme care is taken in providing even the smallest beads with a perforation large enough for a needle, whereas seed beads from some Asian countries are often unevenly and narrowly perforated. In the United States, the Salvadoris' most important customers include Native Americans. The company has been able to revive 19th-century beads in colors that are especially appealing to Southwestern tribes. The firm is represented in America by the Bovis Bead Company in Tombstone, Arizona.

The Salvadoris' manufacturing process begins by feeding sand and certain metallic oxides into a furnace. The oxides determine the diaphaneity of the glass. The sand is considered Europe's finest and comes from Fontainebleau, the same site from which Bapterosses gathered its sand. The cycle of glass making starts with the lightest color, white, and goes through about 60 shades, ending with black. It takes

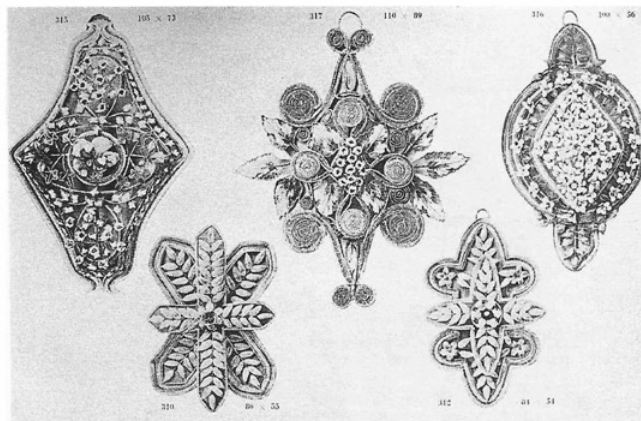


**Figure 4.** Detail of funerary wreath made of *rocailles* mounted on wire, mid 1920s.

several hours at 1,400°C for one batch. After each color, the furnace has to be cooled down and scrubbed.

Until the 1950s, the process of drawing out the gather was done by hand. Now, a machine replaces the two men who ran in opposite directions, each holding one end of the metal rod to which the hollow glass gather was attached. A regulating mechanism sets the speed; the faster it moves, the thinner the tube. Despite this mechanization, Gérard Salvadori remains one of the few masters at drawing canes by hand.

The tubes are subsequently cut into bead-size segments that are placed into a huge bowl-like container with a paste of charcoal and chalk. The container is rocked, forcing the paste into the perforations to prevent their collapse when the tube segments are heated in a tumbler furnace.



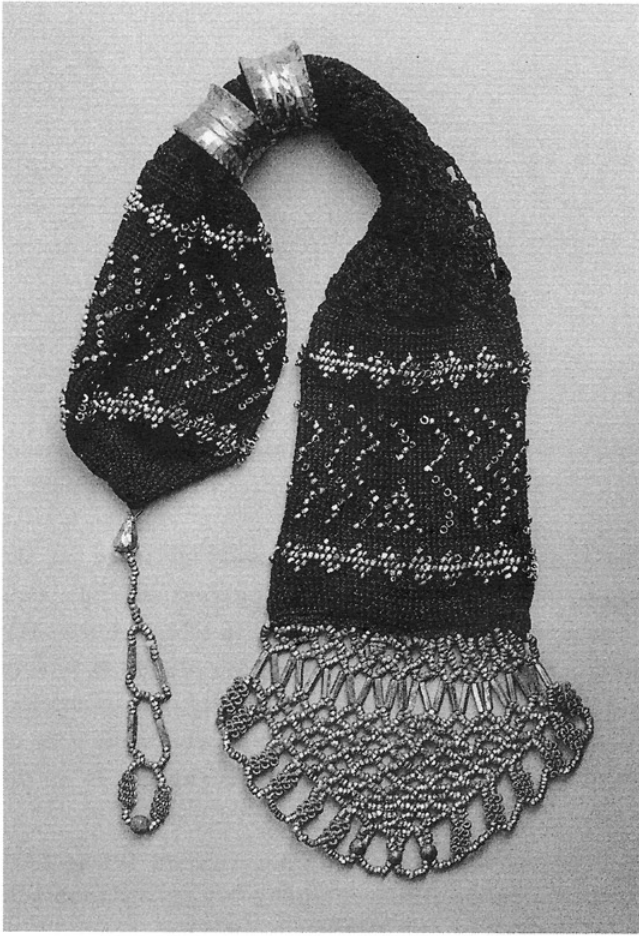
**Figure 5.** Different styles of beaded funerary wreaths from a 1927 catalog.

The latter procedure is extremely delicate, as the shape of the bead hinges on perfect timing. One minute more or less will result in a lopsided or flat bead. After cooling, the beads are placed in a sieve where the paste is removed. Finally, a last check is made on fast-spinning rollers spiked with pins of various thicknesses that pick up the beads as the rollers turn.

No standardized machinery exists for making *rocailles* beads. Each company devises or adapts its own machines for this purpose. The Salvadoris' continued love affair with beads is witnessed by their hands-on running of the firm. For them, the magic of glass has not paled after several generations. Helped by a staff of 20, they follow the intricate process from making the beads to packaging and shipping them with a personal and passionate approach.

### Plastic and Metal Beads

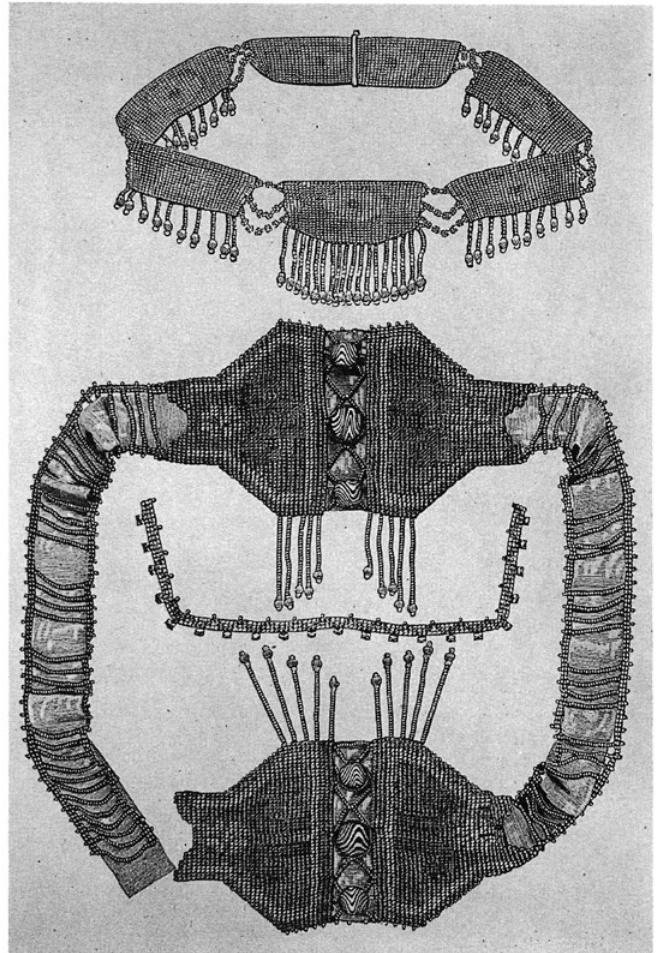
Experiments were conducted with different kinds of plastic materials at the end of the 19th century, and imitations of ivory, amber and horn appeared at the turn of the century. Beads were made from galalith (a milk-based plastic), celluloid, bakelite, and paper soaked in plastic solutions which, when polished, resembled ivory and horn. There were other plastics as well, based on such diverse materials as gelatin, starch, cow's blood and barm (beer yeast) (Fritsch 1926).



**Figure 6.** Turn-of-the-century purse effectively decorated with cut steel beads. This popular style first appeared in the 1850s.

In 1927, the manufacturer Jean Paisseau took out a full-page advertisement in edition no. 18 of *Parures* (1927: 28) for *la nacrolaque* (nacreous products) made of cellulose acetate. Paisseau had been known as a specialist in imitation pearls since the end of the 19th century.

Metal beads were already in vogue in France during the 1850s when small crocheted purses decorated with cut steel beads (Fig. 6) were popular with men as well as women. This trend continued until the 20th century. Articles were produced on looms, crocheted, knitted, embroidered or made simply by stringing or threading beads. The items included bags, lamp shades, bonnets, laced cushions, clothing and decorated hats, as illustrated in a 1920s album called *La perle métallique* (n.d.) which depicts different uses for metal beads. Both



**Figure 7.** Woven necklace with gold melon and aluminum beads (top), and woven Egyptian-style belt with green, gold, pink and garnet-colored metal beads (bottom) (*La perle métallique*, ca. 1920, p. 11).

the album and the beads were sold in *magasins de nouveautés* (novelty stores) which began to appear in the first half of the 19th century (Delpierre 1981: 29). The album specifies that rough metal beads began to be used around 1800, and were subsequently refined to the degree needed for them to be successfully incorporated with other materials in the production of beaded objects (Fig. 7). Only the beads manufactured by the *Maison M. Canuet et Cie.* are recommended (Fig. 8). They offered a wide range of colors including gold, silver, steel and aluminum. The shapes of the beads were quite diverse: *unie* (simple), *taillée* (cut), *extra* (hexagonal), *baril* (barrel), *melon*, *pointillée* (stippled), *torse* (truncated) and *tube torse* (truncated tubes). Metal beads of the *Maison Canuet* were also exported, particularly to the United States.



Figure 8. Metal beads manufactured by *Maison Canuet*, early 1920s.

### Artisanal Beadmakers

#### *Maison Gripoix*

Techniques of bead manufacture in France are often handed down from one generation to another of a family or the employees of a particular glassworks. It is often the case that the chief technician of a given enterprise will purchase it when it goes up for sale. A perfect example of this is *Maison Gasse* which was bought at the end of the 19th century by Augustine Gripoix who retained the original name. This establishment not only specialized in glass beads in imitation of pearl, ruby, emerald, jade and other precious stones, but in preparing sumptuous adornments for artists of Parisian theaters and cabarets. Sarah Bernhardt was a devoted client. Around 1900, numerous well-known couturiers, including Worth, became interested in Augustine Gripoix's costume jewelry.

Suzanne Gripoix succeeded her mother and became a principal supplier for Lanvin, Poiret, Molyneux, Chanel and others. Coco Chanel asked Gripoix to copy certain pieces of her own original jewelry, and it is from this moment on that *Maison Gripoix* began furnishing Chanel with the nacreous glass beads that became her trademark. Suzanne's daughter Josette succeeded her mother in turn, and still runs the business today making glass beads and imitation pearls for *haute couture* (Pl. IIIA). Sacha Guitry commissioned a copy of the necklace worn by the Queen of France for use in the classic film "Si Versailles m'était conté." Curiously, the copy, like the original, was stolen, never to be seen again. *Maison Gripoix's* most celebrated clients include Jean

Cocteau, Dior, Balenciaga, Cardin, Givenchy, Lagerfeld, St. Laurent and Loewe, as well as Vivian Leigh, Zsa Zsa Gabor and Sylvie Vartan.

*Maison Gripoix* currently employs five technicians who either work at the establishment or in their homes. The production of beads and jewelry remains artisanal in order to preserve the high quality of the merchandise. Gripoix also specializes in glass flowers, the fabrication process of which remains a secret inherited from the founder.

#### *René Lalique*

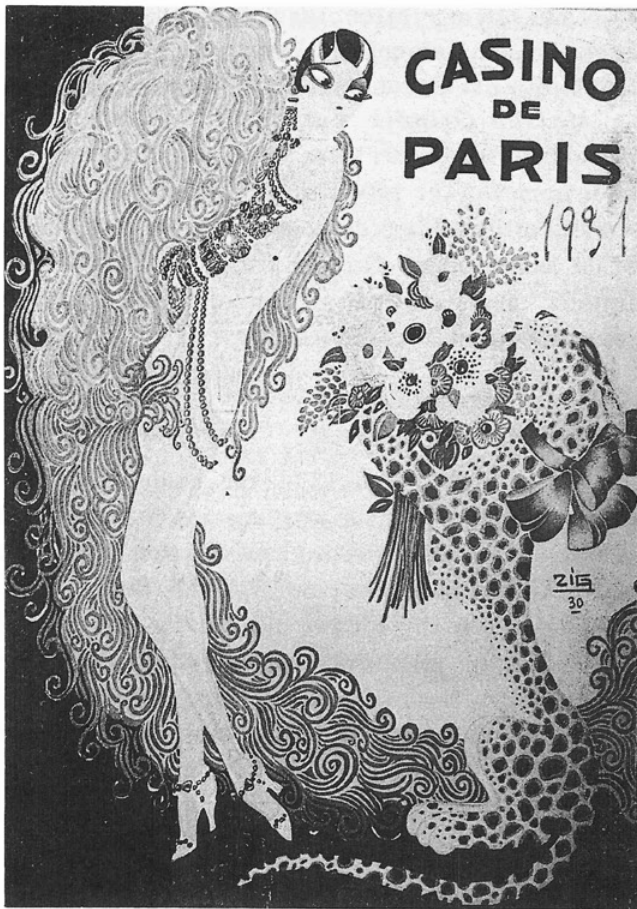
Between 1891 and 1894, the genius goldsmith René Lalique also made costume jewelry for Sarah Bernhardt for her role as Iseyl and Gismonde. Lalique was "a brilliant master of atmosphere" (Becker 1990: 138). He gradually became more and more involved in glassmaking, his desire being to modernize jewelry. He developed his own special glass, a semi-crystal. He created mold-pressed glass beads of a style whose forms, such as leaves and grapes, were inspired by nature.

#### *Louis Rousselet*

One of the most important beadmakers during the period between the two World Wars was Louis Rousselet who employed up to 800 workers.

Rousselet began making glass and galalith beads, metal settings, clasps and ornaments in 1922. His firm furnished all its glitter to the fabled *Casino de Paris*, *Moulin Rouge* and *Folies Bergères* and made high fashion jewelry for the great couturiers, Chanel among them. Mistinguett, the most renowned and durable of the cabaret performers of the time, was a faithful customer of Rousselet (Gumpert 1988: 5).

Rousselet also made all the costume and high-fashion jewelry for Josephine Baker (*Casino de Paris*: 1930-2) (Fig. 9). He was truly a master of his trade, producing superb beads in a very distinctive style that utilized an extremely wide range of colors, forms and materials (Pl. IIIB-D). Although production ceased in 1975, his creations can still be purchased at the boutique *Jeanne Danjou*, located in



**Figure 9.** Josephine Baker in all her beaded glory on the cover of a 1931 revue of the cabaret Casino de Paris. Beads by Rousselet.

the heart of Paris, where his daughter owns and runs the store.

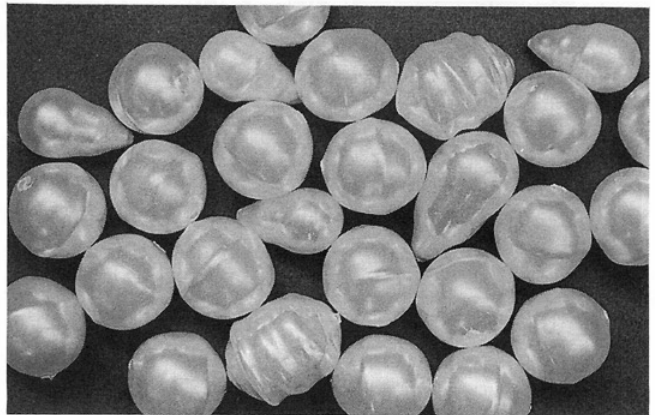
#### *Société Alex*

Contemporary with Rousselet was another renowned French beadmaker, Vincent Alexanian. Born in Istanbul at the beginning of the century, he moved to Paris where he began making nacreous beads. In the 1930s, he started producing colored glass beads that he formed into necklaces. He had sales booths at the famous department stores *Galleries Lafayette* and *Printemps*. At that time, he expanded his production line to include beads of gold and silver foil, aventurine, opalescent glass and imitation turquoise, as well as mold-pressed beads in the shape of hearts, scarabs, buddahs, leaves and flowers.

Alexanian created the *Société Alex* in the 1970s with his two sons Gérard and Franck, utilizing stock



**Figure 10.** Technicians polishing nacreous glass beads in the workshop of Franck Alexanian.



**Figure 11.** Examples of nacreous glass beads by Franck Alexanian (1991).

obtained from Legentil-Crégut, particularly a series of molds for making beads and cabochons. Following the founder's retirement in 1977, the two brothers separated. Franck decided to specialize in nacreous beads made from cotton as well as glass (Figs. 10-11), while Gérard, fascinated by both the manufacture and the history of beads, abandoned his law studies to concentrate full time on his passion: the creation of glass beads and cabochons (Pl. IVA-B). He currently operates an establishment at Loudun in the Loire Valley where he will soon produce his own high-quality glass according to Gilbert Martin's formulae which are in his possession. Gérard has inherited techniques and secrets from his predecessors. He learned how to make imitation granite (Fig. 12 and Pl. IVA), marble and turquoise





**Figure 12.** Gérard Alexanian making imitation granite beads. These are mold-pressed beads made using original Rousselet mixed crushed glass.

from Rousselet. He works with powders and formulae received from Mme. Florent, making compound glass imitations of stones of which his ruby color is particularly rich and striking. His factory, called *Ematec*, employs a dozen workers including two specialists in lampworked beads. Under his guidance,



**Figure 13.** Old bead molds from Gérard Alexanian's workshop at *Ematec*.

other employees make specialized machines, molds (Fig. 13) and copper tubing for the concern.

Alexanian works from his clients' individual orders, making beads for the ready-to-wear high-fashion market. He has neither catalogs, bead sample cards nor stock. In his showroom, he displays beads that he has previously manufactured. He can produce just about anything on command: *tourmentées* (tormented), *tortillon* (twisted), *brisées* (curly), *tapées* (beaten), *perles volcaniques* (crystal glass and silver foil covered with colored glass), ruby glass made with gold, "crackle" beads, *gorge de pigeon* (iodized glass made with titanium tetrachloride; Fig. 14), and nacreous beads made with the famous and expensive *essence d'orient* of which the best quality now comes from the United States. One has only to provide an example, a design or a description for him to create and realize a final product. He can complete an order in a two-week period, and there is no minimum order.

Gérard Alexanian uses German, Italian and old French glass rods while waiting for the completion of



Figure 14. Gérard Alexanian and his assistant M. Bollé making a *gorge de pigeon* (iridized glass) bead.

his own glassmaking equipment. His preference, by far, is the old French stock, an example of which is *ramina*, a black glass with a golden sheen which was a specialty of Gilbert Martin. In order to use this particular rod to perfection, Alexanian must pull the bead from the flame and then return it at an extremely precise moment. According to Alexanian, old French glass rods imitating turquoise or carnelian are unique in that they are a heavy glass containing 30% lead. This glass was especially sought after by countries where silver jewelry was sold by weight; the addition of components of this heavy glass made the finished pieces that much more profitable.

#### *Other Artisanal Beadmakers*

In the 1920s, imitation pearls were truly à la mode; "necklaces" of them were even glued onto postcards depicting beautiful ladies (Fig. 15). Beadmakers in and around Paris who made nacreous beads from the 1920s to the 1950s include Boucher, Gillot, Gauthier and Stichelbault, as well as Gasse (Fig. 16), Van Laar and Schneider, whose advertisements appeared in edition no. 18 of *Parures* (1927:

2, 4, 31). The Gasse establishment also made many glass beads in imitation of precious stones.

Fritsch (1926: 324-9) reveals how imitation pearls were made at this time:

The nacreous paste is insufflated with the aid of a pipette into the hollow balls: by turning the balls, this gelatinous material is spread onto the total interior surface of the sphere. It is finished by filling the sphere with paraffin or wax. *Essence d'orient* can be tinted by using saffron or blue colorant. The glass spheres can be preliminarily made iridescent using titanium tetrachloride. These beads are fragile. One of the first improvements was the use of solid glass or *émail* balls. *Essence d'orient* was applied on the surface and then varnished. The second improvement was the replacement of the gelatin with a celluloid solution.

Beginning in the late 1930s, beadmaking workshops saw a large quantity of their beads being used for costume jewelry, *haute couture* and the sumptuous stage designs and stage jewelry of the French theater and the



Figure 15. Fashionable postcard with actual imitation pearl necklace, 1920s.

famous cabarets such as *Casino de Paris* and *Folies Bergères*. Beadmakers were numerous, including Rousselet, Alexanian, Vitty, Gripoix and Vologine, who composed and sold necklaces using *volcanique* and imitation turquoise beads. They also made beads from *verre soyeux* (silky glass) whose raw material was supplied by glassmakers Appert and Dalloz. In addition, Mme. Auzou, Roppe, Lucien Jode, Mme. Florent, Kossias, Biat, Gillot, Mme. Duvelle and Mme. Boîte were known beadmakers. Mme. Boîte was noted for her flower beads purchased and used by Vincent Alexanian in his creations (Pl. IVC).

Mme. Duvelle's brother Routier specialized in making glass imitation turquoise beads that he sold in

**M. A. GASSE**

— Fournitures —  
— Émail —

Reproduction de  
Pierres décoratives  
Hautes - Nouveautés  
pour Mode et Couture

— Pierres —  
pour Maroquinerie

= Perles =  
Boutons  
Cobocons  
Bracelets  
Colliers  
Breloques  
Bibelots  
Fleurs pour  
luminaires

75, Rue de Turbigo, PARIS (3<sup>e</sup>)  
Téléphone : ARCHIVES 57-02

Figure 16. Advertisement for beads and bead-related products of the *Maison Gasse* (*Parures*, 1927, December).

Venice. Mme. Boucher, another beadmaker, ran her own workshop from 1932-67 at Montreuil-Bagnolet, employing some 30 technicians. She produced many flower, *volcanique* and *poudrée* (powdered) glass beads, as well as *paillons d'argent* (simple silver-foil beads). She was a supplier to Chanel and to Rousselet who was a close friend of hers.

The workshop of Legentil-Crégut employed a special manufacturing technique: glass rods were crushed and piled on metal plates, heated and fused. The resultant enamel was then applied to copper rods in order to transform them into beads. Legentil-Crégut ended these activities in 1970, at which time the *Société Alex* purchased part of the stock.

During the period between World Wars I and II, French beadmakers purchased their raw material from the specialized glassmaker Gilbert Martin. Martin furnished all of France with his glass rods and also exported them to the United States. He was renowned

for the excellent quality of his glass which was said to be superior to that produced in Venice at the time (Gérard Alexanian 1992: pers. comm.).

On the contemporary scene, another noted beadmaker is Simon, located in Bayonne, who furnishes beads for *haute couture*. Others worthy of mention include the *Maison Waniard* which was renamed *Guegand Perles* in 1970, Claudia Flor, and *Etablissements Lukes et fils*, all located in Paris. The latter concern is well known in Paris as both a manufacturer and wholesaler of high-quality glass beads (Pl. IVD). It also wholesales cabochons, findings and trimmings.

## CONCLUSION

France has a long tradition of beadmaking, having produced myriad beads of sundry materials using many different techniques. Probably the most widely distributed products were the glass and porcelain *rocaille* beads manufactured by such factories as Salvadori and Bapterosses. However, France is best known as the leading producer of beads for the high fashion industry and businesses that relate to it. The high point of this production occurred during the period between the two World Wars. The demand for French beads has since declined due in large part to competition from countries that began making less expensive beads during the 1950s. Nevertheless, as in times past, the *grands couturiers* continue to offer fabulous glass bead necklaces and sumptuous clothing embroidered with beads as part of their collections. Beadmakers still produce imaginative products of high quality whether they are destined for *haute couture*, for the ready-to-wear market (Gripoux, Alexanian and Lukes), or for handicrafts (Salvadori).

Even though creators of French beads and fancy jewelry often remain anonymous, having their products sold under the names of their customers in the high fashion industry, certain among them, such as Rousselet and Josette Gripoux, are recognized and well known. In fact, several recent articles have been written about Madame Gripoux (Kalt 1922; Séguret 1990). Moreover, Gérard Alexanian, who has inherited the techniques and secrets of his predecessors, is

breathing new life into the older methods, and his glass creations have established him as one of today's leading French beadmakers.

## ACKNOWLEDGEMENTS

The authors would like to thank the following people for their time, patience and input: Josette Gripoux, Thierry Gripoux, Franck Alexanian and, especially, Gérard Alexanian, whose information about 20th-century French beadmakers and techniques was invaluable. Special thanks also to Jean Bessone, Anita Gumpert, Denise Rousselet and Gérard Salvadori.

## REFERENCES CITED

- Barrelet, James**  
1954 *La verrerie en France de l'époque gallo-romaine à nos jours*. Larousse, Paris.
- Becker, Vivienne**  
1990 Lalique. In *The Master Jewelers*, edited by Abraham K. Snowman, pp. 125-40. Abrams, New York.
- Casino de Paris**  
1931-33 Various programs. Paris.
- Delpierre, M.**  
1981 *La mode et ses métiers: du XVIIIème siècle à nos jours*. Musée de la mode et du costume, Paris.
- Diderot, Denis and Jean D'Alembert**  
1751-72 *Encyclopédie*. Paris and Amsterdam.
- Foy, Danielle**  
1989 *Le verre médiéval et son artisanat en France méditerranéenne*. Edition du Centre National de la Recherche Scientifique, Paris.
- Francis, Peter, Jr.**  
1988 The Glass Trade Beads of Europe: Their Manufacture, their History, and their Identification. *World of Beads Monograph Series 8*.
- Fritsch, J.**  
1926 *Fabrication des matières plastiques*. Desforges, Girardot et Cie., Paris.
- Garnier, E.**  
1886 *Histoire de la verrerie et l'émaillerie*. Mame et fils, Tours.

**Gumpert, Anita**

- 1988 Fifty-three Years of Paris Beadmaking. *The Bead Society of Greater Washington Newsletter* 5(1):5-6.
- 1990 The World of Rocaille. *The Bead Society of Greater Washington Newsletter* 7(1):1-4.

**Kalt, Marie**

- 1992 Les riches heures de la fantaisie. *Bijou* 2:22-7 (summer). Point d'exclamation éditeur, Paris.

**Le Vaillant de la Fieffe**

- 1873 *Les gentilshommes et artistes verriers normands*. Rouen, France.

**Marascutto, P. and M. Stainer**

- 1991 *Perle Veneziane*. Libreria Sansovino, Dolomiti, Italy.

**La mode illustrée**

1860-1900 Various advertisements and articles. Paris.

**Parures, revue des industries de la mode**

- 1927 No. 28. Edition de la Société des Publications Corporatives, Paris.

**Peligot, E.**

- 1877 *Le verre, son histoire, sa fabrication*. Masson, Paris.

**La perle métallique: traité pratique**

n.d. Cartier-Bresson, France. Published ca. 1920.

**Seguret, Olivier**

- 1990 Josette Gripoix, nacre et émail. In *Entrée des fournisseurs*, by Prosper Assouline, pp. 124-37. Editions Assouline, Maeght éditeur, Paris.

**Sleen, W.G.N. van der**

- 1967 *A Handbook on Beads*. George Shumway, York, Pennsylvania.

**Sprague, Roderick**

- 1983 Tile Bead Manufacturing. In "Proceedings of the 1982 Glass Trade Bead Conference," edited by Charles F. Hayes. *Rochester Museum and Science Center, Research Records* 16:167-172.

Marie-José Opper  
Howard Opper  
1023 Cross Drive  
Alexandria, Virginia 22302