specialized in the lost-wax casting method to create his work and even wrote a textbook on the subject. 113 Winston influenced the work of MAG members Robert Dhaemers, Florence Resnikoff, and Irena Brynner, among others. Robert Dhaemers utilized techniques and surface treatments such as patinas and engraving to give his jewelry a worn appearance. He didn't believe in the "artificial maintenance" of keeping jewelry polished. 114 Florence Resnikoff's jewelry showcased her interest in color and metallurgy. She utilized several techniques to achieve her designs including casting, enameling, electroforming, and anodization of refractory metals. 115 Franz Bergmann, an immigrant from Vienna, was one of the few jewelers in San Francisco who maintained an atelier. He forged wire and cut sheets to produce his works with a constructivist and/or surrealist designs. 116 Irena Brynner, who apprenticed with Bergmann briefly, looked at jewelry as sculpture and applied techniques such as forging and piercing to realize her designs. Her later works simulated the appearance of the lost-wax casting techniques; however, she developed a new aesthetic using a tool called a water welder. Peter Macchiarini, another studio/shop owner, incorporated ideas of constructivism and anthropomorphism in his designs. His designs showcased internal structures with the use of patinas as well as found objects. 118 Merry Renk replicated the geometric abstract structures found in nature. Her early works were nonobjective designs that emphasized the potential of metal by using interlocking forms, metal folding, and enamel. As she developed her design philosophy, she progressed into more realistic and less abstract forms. Milton Cavagnaro was a metalsmith who combined materials such as wood, bone, and shell into his designs — wood usually being the dominant material in his work. 119 These are but a

few examples of the results that MAG members produced based on their collective learning and sharing, and many of these pieces would eventually end up in shows and exhibitions across the U.S. (fig. 26-27)

MAG artists were accepted into contemporary art jewelry exhibitions throughout the country, including *Designer Craftsmen U.S.A.* at the Brooklyn Museum of Art (1953), the *Contemporary Jewelry Exhibit on Paper*, published by the Walker Art Center in Minneapolis, MN (1955, 1959), *American Jewelry and Related Objects*, circulated by the Smithsonian Institution (1955-1957), *Designer Craftsmen of the West* at the M.H. de Young Museum (1957), *Brussels Worlds Fair* (1958), *Young Americans* at the Museum of Contemporary Crafts (1958), and *International Exhibition of Modern Jewellery 1890-1961* at Goldsmiths' Hall in London (1962), among countless solo and group exhibitions throughout the United States and abroad.

In conclusion, this chapter addressed the confluence of events in 1930s and 1940s that set the stage for a group of Bay Area studio jewelers to come together to form the Metal Arts Guild of San Francisco in 1951. The chapter demonstrated the impact the shift in the socio-economic and political landscape had on future MAG founders as they worked for the Works Progress Administration and the California Labor School.

Although MAG itself had membership with other craft organizations, Bay Area metalsmiths sought protection of their economic interests in a manner similar to the International Jewelry Workers Union and the Artist Equity Association. In doing so, MAG advanced not only the metalsmiths' commercial interests, but also the American studio jewelry movement through the promotion of modern jewelry to the public. This

chapter showed how MAG members were actively engaged in the field of metalwork on a local, national, and international level; worked at educational institutions; participated in major exhibitions; and had their work acquired by shops, galleries, and museums. Additionally, the chapter illustrates the spectrum of work produced by its members. The following chapter explores MAG and the organization's impact on both the American studio jewelry movement and its importance abroad through the careers of founding members and jewelers Margaret De Patta, Peter Macchiarini, and Irena Brynner.

CHAPTER 3: CAREERS OF SELECTED METAL ARTS GUILD MEMBERS

Chapter three investigates the lives and careers of three pivotal founding members,

Margaret De Patta, Peter Macchiarini, and Irena Brynner, of the Metal Arts Guild

(MAG). An investigation is conducted regarding their personal and educational

backgrounds, artistic influences, careers, approach and philosophies regarding design and

mass production. This review will highlight their involvement with MAG and their

contributions to the American studio jewelry movement.

From its inception, the Metal Arts Guild has counted many influential metalsmiths among it members. Although each member has contributed to the Guild and the American studio jewelry movement in his or her own way, three of the founding members – Margaret De Patta, Peter Macchiarini, and Irena Brynner – are of particular importance. A study of these artists' backgrounds and careers demonstrates the individual development of their design philosophies, their contributions to the shaping of modernist jewelry, and their impact on the American studio jewelry movement through their work at MAG.

Margaret De Patta

Margaret De Patta, a star in her own right, felt that there was a need for an organization to champion the cause of the studio jeweler and metalsmith. As a founding member of MAG, she had a far-reaching impact on the Guild and the American studio jewelry movement. She contemplated the contradictions confronting the artist-craftsman

who valued hand-wrought design, but faced pressure for a share in the marketplace in a consumer capitalist economy. Nevertheless, she revered good design in all cases. To put her significance in context, it is important to understand her background and early career to see why she made such an impact on modernist jewelry.

Born Mary Margaret Strong in Tacoma, Washington in 1903, and reared in San Diego, California, she began her foray into art as a painter. (fig. 28) De Patta attended the newly opened San Diego Academy of Fine Arts and studied painting from 1921 to 1923. She continued her studies in painting and sculpture at the California School of Fine Arts in San Francisco from 1923 to 1925, and later at the Arts Students League of New York in 1929. De Patta's venture into jewelry design started by happenstance. She was searching for a wedding ring to be used for her pending nuptials to her third husband, Salvatore "Sam" De Patta. 120 (fig. 29) She wanted a ring that "would combine a special meaning with artistry of design." 121 Not satisfied with what was available, she met with Armenian jeweler Armin Hairenian at the Art Copper Shop to discuss her ideas and began to work as his apprentice for two months and made her wedding bands herself. 122 During this time, De Patta studied ancient Egyptian, Pre-Colombian, Etruscan, Turkish, and Mexican artifacts and jewelry at Bay Area museums and libraries. 123 As early as 1932, De Patta began studying engraving and enameling techniques and her jewelry designs "consisted of arrangement of simple elementary forms." Her early metal works in the 1930s reflected her progression as a metalsmith, as she learned the fundamentals about material, process, and technique. (fig. 30) She realized her designs using materials such as silver wire, metal sheets, and semi-precious stones. These early pieces were based on

"natural forms, rhythms and harmonies such as found in the human figure, flowers, leaves, ferns, fish and scarabs." ¹²⁵ (fig. 31) However, a shift in the appearance of her work appeared in the late 1930s, and can be seen in her transitional piece selected for the 1939 Golden Gate International Exposition on Treasure Island in San Francisco. (fig. 32) This oval brooch has a leaf motif, but is highly stylized indicating De Patta's newfound interest in modern design. The exhibition recognized modernity in the Decorative Arts and showcased furniture, glass, lace, metals, rugs, wallpaper, textiles, bookbinding, liturgical art, enamels, costume design, architecture, interior design, and jewelry. Along with De Patta, participants included Marc Chagall, Alexander Calder, Max Ernst, Walt Disney, Henri-Matisse, Salvador Dali, Grant Wood, Pablo Picasso, Albert Giacometti, Glen Lukens, Victor Schreckengost, Russel Wright, Alvar Aalto, Marcel Breuer, Wharton Esherick, Kem Weber, Josef Albers, Rene Lalique, Harry Dixon (MAG Founder), Dirk Van Erp, Ansel Adams, Isamu Noguchi, Claire Falkenstein, Beniamino Bufano, Ruth Cravath, Naum Gumbo, Ferdinand Leger, Jean Miro, Man Ray, and László Moholy-Nagy, among others. At the fair, Moholy-Nagy's Light Display Machine, shown at the 1930 Salon des Arts Décoratifs in Paris, was also exhibited. 126 (fig. 33)

The following year, in 1940, Mills College offered a summer session in conjunction with the traveling Museum of Modern Art exhibition *The Bauhaus: How It Worked*. The college invited faculty from the School of Design in Chicago (later known as the Institute of Design), some of whom included: Moholy-Nagy; photographer, theorist, and painter György Kepes; painter Robert Jay Wolff; weaver Marli Ehrman; furniture designer Charles Niedringhaus; and artist, designer, and craftsman James

Prestini. 127 They taught classes such as drawing, painting, photography, weaving, paper cutting, metalwork, modeling, and casting. 128 It is during this session that De Patta enrolled as a student and took a course with Moholy-Nagy. 129 (fig. 34)

Already an established jeweler, De Patta was interested in the modernist philosophy and decided to continue taking classes with constructivist Moholy-Nagy at the School of Design in Chicago. It was at this "Bauhaus-oriented" institution that De Patta began to fine-tune her design philosophy. De Patta began to explore constructivism and abstraction, and consciously developed a modernist approach to design. Taking courses in sculpture and photography, she gained awareness about the "broader spectrum" of materials. Through her work in sculpture and photograms, she studied the phenomena of light, color, and the nature of volume of space, lines, and planes. (fig. 35) De Patta discussed her studies at the School of Design and the evolution of her design philosophy:

The horizon to unlimited directions – experiment followed experiment in metal structure; new structural ways of fastening stones with the resultant need for differently shaped stones related to the structures. All surface texture or manipulation was strongly rejected as being superficial. Work with transparencies was developed but intuitively only until 1940 when a period of study at the School of Design – now the I[nsitiute] [of] D[esign] – with Moholy-Nagy in Chicago concretised [sic] and objectivised [sic] feelings and ideas. The first mobile ring incorporating 5 types of movement was made at this school – was passed from hand to hand among students gathered for a lecture – with distracting effect. Problems posed for work in glass, plastics, mirror revealed principles of visual excitement, optical illusion and pointed a field of exploration that has proven inexhaustible. Work in sculpture, wood, clay, plaster, plastics, and stone carving, brought the volume and space understanding and the line of demarcation between fine arts, crafts, fine industrial design dissolved before my eyes. ¹³¹

As De Patta began incorporating ideas regarding light, movement, function, and production into her work, she looked to alternative materials and structure to capture her new design vision. In doing so, her jewelry aesthetically changed. De Patta admitted that her early jewelry pieces were primitive, "until one day the full knowledge came that the basic metal forms (line=wire, sphere=grain or dome, plane = sheet) integrated to shank and superstructure, were 'architecture.' She used materials not for their value, but for their viability in expressing space, volume and light – ideas shared by her mentor, Moholy-Nagy. He told De Patta to "catch your stones in the air ... make them float in space, don't enclose them." De Patta began using gemstones in her jewelry not only to fulfill her structural vision, but for their refractory effects. She stated, "[t]he fascination of looking into or through an object or material is boundless ... add the excitement of optical effects such as magnification, reduction, multiplication, distortion and image reflection, and the function of the gemstone in jewelry becomes one to stimulate the ingenuity and imagination of the designer." 134 This was a clear departure from her earlier works that had applied ornament and historical references. De Patta's new pieces embodied modernist principles of constructivism, removed references to the past, used restraint in use of materials, and incorporated light, movement, and linear and abstract forms.

De Patta began to collaborate with expert lapidary and metalsmith Francis

Sperisen (also a founding MAG member) in designing gem cuts to achieve the optimal light effects she wanted in her designs. (fig. 36) De Patta would bring balsawood or aluminum models of the shapes she was interested in using, and Sperisen would combine

her ideas with his own to create the gem cuts. ¹³⁶ Often De Patta would use rock crystal, quartz, and black onyx. Sperisen introduced De Patta to rutilated quartz (also known as Venus Hair Stone). Rutilated quartz has mineral hair-like inclusions and range in colors from black, silver, gold, and gray. ¹³⁷ Sperisen's most significant contribution to the evolution of De Patta's design vision and the field of jewelry was the new development of unique stone cuts that captured various optical effects - which De Patta dubbed the "opti-cut." ¹³⁸ No other lapidary or jeweler had ever developed these particular cuts before.

De Patta felt jewelry was a dynamic object and applied constructivist theory to her designs. (fig. 37) In a 1942 ring made of yellow gold with a faceted citrine topaz mounted over a pearl, the four circular facets of the stone make it appear that the ring has movement - as if looking through a fan. The four facets and concave base of stone magnify the pearl, creating a "multiplicity of images." (fig. 38) In an undated pendant, De Patta designed a pear shaped opti-cut smoky quartz held with angular gold structure to magnify a pearl held in place behind the piece. (fig. 39) The same opti-cut is used with a crystal in an undated ring made with white gold to achieve maximum refraction. (fig. 40) Both the pendant and ring showcase a particular type of opti-cut called a double lens cut, which gave the quartz an optical effect of movement even as the structure is stationary. In a 1947 ring, made of white gold with rutilated quartz crystal, De Patta used a traditional prong setting for an opti-cut cone-shaped stone, and incorporated the supporting structure to serve as a design element in the ring. According to De Patta, the design was an example of structural interdependence of both the stone and the

mounting.¹⁴¹ (fig. 41) In a circa 1950 brooch, De Patta used a cabochon cut stone to magnify the mesh-screen base. (fig. 42) These pieces show DePatta's employment of gemstones not simply for their form, but also using light as a functional element within her designs.

De Patta was not only focused on light-play, but she also observed the importance of structure, line, and functionality. Such interest paralleled her study of architecture. A 1947-1950 pin made with sterling silver with coral and malachite, allowed the wearer to pivot a section of the pin to choose a desired form. 142 (fig. 43) In a 1948 pendant made of yellow gold with rutilated quartz crystal slab, De Patta used the stone for its transparency as well as for its asymmetrical emphasis as well as for dictating the lines of structure. 143 (fig. 44) And finally, in her 1962 Pin, she used white gold wire to form a geometric cage with a gemstone inlay to articulate structure line, space, line, and plane. 144 (fig. 45)

While De Patta was exploring the properties of gemstones and developing a new body of work, she went to teach at the California Labor School around 1944. (fig. 46) It is here that she taught alongside future founding MAG members Eugene Bielawski (whom she married in 1946) and Peter Macchiarini. It is interesting to note that De Patta did not teach the *Metal Workshop*, but in courses such as *Plastics*, *Home Planning*, *Industrial Arts*, *Stage Design*, *Sculpture*, and *Basic Design*. According to her lesson plans and notes from CLS, it is clear that De Patta was applying what she learned at the School of Design. She lectured on topics such as structure, space, line, planes, and material. In her plastics class, she explored the visual qualities of plastic – its distortion, magnification, reflective nature, and texture in order to "develop general principles of

design that could be used late in application in specific jewelry design projects."¹⁴⁵ It is evident from the subject matter in which she taught, De Patta did not simply see herself a jeweler, but rather an artist-craftsmen-designer.¹⁴⁶

At the same time she was teaching at CLS, De Patta expanded her jewelry design offerings. In addition to her one-of-a kind and custom order business, she started Designs Contemporary, with her husband, Eugene, out of their San Francisco home studio in 1947. 147 (fig. 47) This was a limited edition production line that produced handcrafted jewelry available for under fifty dollars. (figs. 48-49) That same year De Patta's work was exhibited in the Museum of Modern Art's landmark exhibition, *Modern Handmade Jewelry*. In 1947, she wrote, "Jewelry for An Ever Increasing Minority," an essay published under the title "De Patta" in *Art and Architecture*. (fig. 50) The essay addressed the financial implications and dichotomy between making one-of-a-kind handmade works affordable to a few and developing a production line accessible to the masses. The following year, her production pieces were shown in the exhibition, *Modern Jewelry Under Fifty Dollars*, at the Walker Art Center in Minneapolis, Minnesota. And in 1949, she exhibited a ring and a set of earrings at the Detroit Institute of Arts exhibition *An Exhibition of Modern Living*.

As her contemporaries increasingly recognized De Patta's jewelry, the value of her work priced some of her customers out of the market. Although De Patta felt that "the artist has a responsibility to relate to present society," she had mixed feelings as to starting the production line. 148 She understood the problems facing the craftsperson in an era of industrialization, but felt that an interchange between production designer and

craftsperson was good. De Patta believed that "a creative individual well-grounded in the fundamentals of color, composition, form relationships, and working with hand and machine techniques, is bound to produce articles of valid aesthetic value to fulfill the use needs of people."¹⁴⁹

The combination of De Patta's teaching and business experience led her to realize that metal artists needed an organization that could advance both the level of craftsmanship in her field as well as promote artists economic interests. She addressed the problem of the craftsman in her personal notes:

The last number of years has brought widespread resurgence of activity in all hand processes – a recognition of the importance of intimate knowledge of materials gained through use of hand tools as the initial step in the training of industrial designers use in recreational and occupational therapy – a hobbyists activity and as a means of earning a livelihood through direct sales of work or through teaching - creative professional stands at the apex of this pyramid and along with creative problems faces the additional ones of production, marketing, and plagiarism [sic]. ¹⁵⁰

These ideas are part of the impetus for the founding of the Metal Arts Guild. De Patta, as a founding member, served as President of MAG twice (1951 and 1955). (fig. 51) As a component of achieving the educational aim of the organization, De Patta held a program for MAG members on the fundamental principles of design. The classes were well received among its membership, so MAG decided to add an additional lecture series led by De Patta. The goal of these lectures was to pass on De Patta's understanding of her approach to design, garnered from her experience at the School of Design.

Additionally, De Patta further spread the influence of modernism and the American

studio jewelry movement as she was invited to teach not only to students at the California Labor School, but also at the Shattuck School at the Portland Art Museum in Portland, Oregon as well as the California College of Arts and Crafts in Oakland, California.

Prior to forming MAG, De Patta had already established herself in the arts, and was defined as a pioneer in the studio jewelry movement. However, her stature in the field helped elevate MAG's visibility beyond the Bay Area. This was a benefit of De Patta's academic work and the fact that her work was shown worldwide. De Patta continued to write for national publications and academic journals such as *Craft Horizons* and *The Palette* for Ball State Teacher College. She also lectured across the country, and in 1958 was invited as a panelist for the seminar on *Vision and Individual Response* at the Second Annual Craftsmen Council Conference, *Dimension of Design*, in Lake Geneva, Wisconsin.

While she exhibited and sold her work through MAG's booths at Annual Shows and San Francisco art festivals, De Patta's were also being sold at retailers across the country, including America House in New York, Contemporary House in Texas, Georg Jensen in New York, among others. Additionally, De Patta's work was selected for exhibitions such as: *Designer-Craftsmen U.S.A.* at the Brooklyn Museum of Art (1953); *84 Contemporary Jewelers* at the Walker Art Center (1955); *Creative Jewelry* at the American Federation of the Arts (1955-1957); *American Jewelry and Related Objects* which the Smithsonian circulated throughout the United States (1955); *The Arts of Western Living* at the Los Angeles City Fair (1955); *Jewelry by De Patta* at Ohio State University (1956); *Craftsmanship in a Changing World* at the Museum of Contemporary

Crafts (1956); Jewelry: Past and Present, traveling exhibition (1957); Expo 58:

Exposition Universelle et Internationale de Bruxelles, also known as the Brussels World's Fair (1958); Designer-Craftsmen U.S.A. 1960 at the Museum of Contemporary Crafts (1960); and the International Exhibition of Modern Jewellery 1890-1961 at Goldsmiths Hall in London (1962).

De Patta's successful career is but one of the reasons that MAG should be considered an important organization in the American studio jewelry movement. Her work was exhibited around the world bringing notoriety not only to De Patta herself, but also to fellow jewelers of the Metal Arts Guild. She was able to intellectualize the field of jewelry like no one else before her, and transformed jewelry into an art form.

Although De Patta's life was cut short by suicide in 1964, her legacy lived on through the generations of artists she impacted because of her revolutionary ideas on craft and design as applied to jewelry.

Peter Macchiarini

Recognizing the need for artists to band together, Peter Macchiarini helped establish MAG as an organization designed to support the metal artist community. As a veteran of the WPA in the 1930s, he understood the plight of both the laborer and the artist. Macchiarini advocated for the economic interests of the craftsperson and the preservation of their role in a society now dominated by mass-produced goods. Although a founding member of MAG, Macchiarini's support of the organization had its

complications. Nevertheless, his impact on the Guild and the contribution he made to the American studio jewelry movement cannot be understated.

Born in Santa Rosa, California on August 27, 1909 to Italian immigrants, Macchiarini lived in America until the age of fourteen when his parents moved back to Italy. It is there that Macchiarini began his foray into the arts. He entered the Art Academy at Pietrasanta where he trained in ornamental work, marble carving, clay modeling, architectural drawing, and general sciences.¹⁵¹ Following his years of study, Macchiarini carved names tombstones in a French cemetery for fallen American soldiers. 152 In 1928, Macchiarini returned to San Francisco and worked for a terrazzo company, P. Graffi and Company, until the onset of the Great Depression. ¹⁵³ In 1931, unable to locate work in San Francisco, Macchiarini decided he needed a change of scenery. Jumping freight trains and hitchhiking, Macchiarini traveled across America, observing the use of marble and granite along the way. 154 After he explored Boston and New York for three and a half months and unable to locate work on the east coast, Macchiarini returned to San Francisco. There, he was able to get a job through the Civil Works Administration (CWA), a precursor to the WPA and mainly focused on construction projects. Macchiarini referred to his work as a "pick and shovel job." 155 A few years later, after his marriage to Virginia, Macchiarini went to work for the WPA alongside painter, sculptor, and puppeteer, Ralph Chesse, in the Federal Theatre Project (FTP). Macchiarini would cast the heads of the puppets and sometimes filled-in for acting parts. He worked on various plays, The Sun and I, Mikado, Alice and Wonderland, *Marionette Vaudeville*, *Hansel and Gretel*, to name but a few. (fig. 52) Macchiarini ascribes his progression into jewelry design to his tenure with the FTP.

On the theatre project while waiting to go on [stage], I used to nervously whittle on a piece of wood and I used to carve these masks, tragedy and comedy masks, and the girls in the theatre used to like them and at first I used to give them to [the girls]. Then the demand became so great that I felt that some of my expenses should be defrayed, like buying a rare piece of wood. 156

At the suggestion of De Patta, Macchiarini added pin backs to his miniature masks. ¹⁵⁷ (fig. 53) As demand grew for Macchiarini's creations, he started thinking about how he could turn his neurotic hobby into a line of business. Until that time, Macchiarini experienced first-hand the difficulties and challenges the laborer and craftsman faced in California. In 1934, the maritime workers and longshoreman had called a strike. In solidarity with the unions, students and other youths took to the San Francisco Embarcadero district on May 30, National Youth Day, to rally their support. Unfortunately, the police swarmed the streets swinging billy clubs at everyone in their path. As a result of the police not being able to distinguish the bystanders from the protestors, many innocents were severely beaten, including Macchiarini. Journalist and witness Mike Quinn described the scene,

A talented young sculptor, Peter Macchiarini, was thrown into the police patrol bleeding from the ears with a fractured skull. Despite the entreaties of other prisoners that he was dying, he was thrown in a cell and not removed to a hospital until many hours later, when his cellmates gave evidence that if something were not done about him they would shake the bars off the cage and scream the roof off the jail. It was many months before Pete's head mended, and when he was able to get around again he had to face trial on charges of rioting. 158

Dominating the headlines during this time were the many labor struggles both San Franciscans and Americans confronted. Such issues served as a catalyst for workers, artists and intellectuals to organize. Prior to Macchiarini's unintentional involvement with the volatile labor situation, he had transferred from the FTP and went to work for modernist sculptor Beniamino "Bennie" Bufano under the WPA. Both Bufano and actor Will Rogers visited Macchiarini in jail, bringing much attention to his predicament. [159] (fig. 54)

Bufano, a modernist sculptor and former pupil of American sculptor Paul

Manship, was a colorful and controversial figure in the WPA. Bufano once cut off his

finger in protest of World War I and mailed it to President Woodrow Wilson. 160

Macchiarini worked for Bufano for a year and a half when Macchiarni worked on clay

modeling sculptures in full-scale for a project called Sun Yat-Sen. Macchiarini worked

on the wall section surrounding the sculpture of Sun Yat-Sen; however, due to Bufano's

removal from the WPA, the wall was never constructed. 161 For a short period,

Macchiarini also worked for sculptor, painter, and art educator, Ralph Stackpole and

modernist sculptor, ceramist, and sculptor, Sargent Johnson. 162 Macchiarini later went to

work with ceramist and sculptor Johnny Magnani to make small-scale clay modeling

sculpture. Magnani was a professional mold maker, ceramist, and kiln builder and once

served as president of the mold-makers union. Under Magnani, Macchiarini would make

bas-reliefs of animals. 163 Shortly thereafter, he was transferred to a WPA Home Project,

where Macchiarini was assigned to make and carve a chess set out of wood. Macchiarini

felt frustrated by the demoralizing work, and in 1938 started making jewelry to earn a living. ¹⁶⁴ Macchiarini did not receive a formal education or an apprenticeship in metalsmithing. Rather, he taught himself how to make jewelry by reading books on modern jewelry and the Bauhaus; and applied his background as a sculptor and stone carver to metalsmithing. ¹⁶⁵ His jewelry served as his sculpture in miniature. (fig. 55) Macchiarini described his foray into jewelry making:

I saw some pictures of work they were doing and that first inspired me to go in that direction rather than to follow in the old traditional method of the academy where I had been taught, you see. So I went in the direction and later on I saw some of Moholy-Nagy's work and I saw Margaret DePolta's [sic] work, who had preceded me as a jeweler by some five years and she went into the direction of the Bauhaus and I was further inspired by her work. ¹⁶⁶

Macchiarini considered himself a self-taught artist, and set up his studio and business full-time after World War II. His early works reveal his exploration of the fundamentals of metalsmithing along with his curiosity for modernist design. Utilizing materials such as silver, nickel, glass, ebony, copper, and acrylic stones, Macchiarini's pieces during the 1930s represent an eclectic group. His earlier works border on a primitive aesthetic due to both his evolving skill set in metalsmithing and his increased familiarity with modernist philosophy. Macchiarini's jewelry during this period "display anthropomorphism and displacement of body parts seen in African tribal artifacts and in Cubism." (fig. 56) An example of such works was an oxidized silver brooch with undulating wire and a crudely cut pair of oxidized silver cufflinks showing an abstract image in profile. (fig. 57)

As Macchiarini became accustomed with his craft, he developed designs for which he would later be recognized - layered pods. A transitional example of this direction is Macchiarini's silver pendant, which has a cut-out layered dome. (fig. 58) Historians liken this aspect to Macchiarini's "experimentation with internal structuring through the use of fenestration that reveals pierced and layered metal planes ... [and] provided visual symbols of the life force he perceived within the solid forms." While Macchiarini looked to modernist design movements, such as streamlining, constructivism, and cubism, for inspiration, Bufano also influenced Macchiarini's oeuvre. "Bufano believed that the exterior form was the most important element of sculpture. He liked to compare this concept to what he considered 'nature's most exquisite sculptural form – the egg.'"169 Many of Bufano's modernist sculptures were smooth, rounded, and simplified. Macchiarini was attracted to Bufano's notion of the egg; however, Macchiarini wanted to also explore the interior of the egg. Thus, Macchiarini's signature contribution to the American studio jewelry movement was the "multi-layered creations he called 'pods.'"¹⁷⁰ Throughout the 1940s and 1950s, Macchiarini would develop and explore these forms. Using a variety of materials, he would use patinas to emphasize the depths of excavations in his work.

Over the years, Macchiarini continued to explore other aspects of sculpture and metalworking. As his business grew and he developed his design principles regarding craftsmanship, Macchiarini began to share his newfound wisdom with students and his contemporaries. Many artists including Bufano, De Patta, Renk, and Stackpole frequented Macchiarini's Grant Avenue studio in the North Beach neighborhood of San

Francisco. Artists would come by to observe Macchiarini work in his studio, while others would have long discussions about current events, modernism, art, and jewelry. (fig. 59) Macchiarini became a staple figure in his North Beach neighborhood and in San Francisco, and was instrumental in organizing the early San Francisco Art Festivals in 1939, 1940, and 1941, as well as starting the Upper Grant Avenue Street Fairs. (fig. 60) Macchiarini's holloware, jewelry, and sculpture were exhibited at fairs, galleries, and galleries in and around California as well as featured in *Arts and Architecture* and *Art Week*.

Such exposure led Macchiarini to start teaching students metalsmithing out of his studio once a week in the 1940s. In 1944, Macchiarini began to teach at the CLS in Metals and Basic Design. His classes would give students an understanding regarding the "fundamentals in modern metal design and technique ... [and] give students an understanding of the potentialities of material and enable them to design and work with metals." Macchiarini's design classes would discuss such fundamentals, but left it open to students to design anything from bookends to wood sculpture. During the 1950s, he taught jewelry and metal sculpture at Mills College (1952, 1955). 172

Macchiarini's teaching gave him the opportunity to develop his ideas regarding mass production. As a lifelong craftsman and artist dedicated to handwrought design, Macchiarini was weary of the machine replacing the artisan. While he believed there was a place for industrial design, it did not serve the same purpose as art. Macchiarini believed that mass produced goods would never achieve the same soul or emotional pull of handcrafted wares. He argued that craftspeople pursuing the mass production of art for