7-2006

Bound

Michelle Griffith Perlich

Rochester Institute of Technology

A thesis submitted to the faculty of

The College of Imaging Arts and Sciences

In candidacy for the degree of

Master of Fine Arts

Bound

By

Michelle Griffith Perlich
Date: July 2006

Approvals

Chief Advisor: Leonard Urso Leonard Urso /

Date: August 1 2006

Associate Advisor: Juan Carlos Caballero-Perez /

Date: 8-1-2006 Juan Carlos Caballero-Perez

Associate Advisor: Michael Rogers Michael Rogers /

Date: 9/10/2006

Department Chairperson: Julia Galloway /

Date: 9/18/06

Michelle Griffith Perlich

Signed

Date: July 1 2006

Table of Contents

Introduction

There never has been a civilization in which the members of various ranks of society did not adorn themselves, always trying to enhance their image. People have presented gifts of jewelry in order to express love, affection, respect and friendship, and they have worn jewelry themselves to demonstrate both affluence and power. It can be said that throughout history, power and ornamentation are often one and the same.

Because I feel that finger rings are the most important form of body ornamentation, I chose to fabricate a series of rings as my project. Fingers rings are one of the few pieces of jewelry that cannot be covered up, and hands are one of the first things a person notices when he or she meets someone. In addition, hands tell a story about people's lives, as do the rings they wear: The kind of work they do, whether they are wealthy or educated, their marital status, and more.

This paper contains four major sections. The first section focuses on the historical development of the ring and how the finger ring in every era has reflected the function and aesthetics of its time. The second part delves into the different materials I have chosen to use, and why I selected them. The third section examines what influences have affected my work, and

includes a detailed explanation of the eleven rings shown in my thesis project. The conclusion summarizes how my art reflects my aesthetic.

Historical Development of Finger Rings

Finger rings have been traced back to 3500 B.C. Over the past 5500 years, rings have been used for the symbolic transfer of power or as an indicator of rank, used as a seal, given as a token of love or as a diplomatic credential, utilized to indicate religious faith or to drive away misfortune, and looked upon as a badge of political allegiance.

In the Roman Empire, the number of rings on a man's finger indicated his professional status and success. In the middle and later eras of Roman civilization, the types of rings that were worn were governed by law. Iron rings were worn by ordinary people; gold rings were reserved for those of high civil or military rank. Later, gold rings were permitted to freeborn citizens, silver to freemen, and iron to slaves. The Romans also used poison rings for assassination or suicide in case of capture by the enemy.

Signet rings were employed as early as the second millennium B.C. in Egypt and are still popular today. Signets hold first place among rings made to serve a practical purpose. At a time when the art of writing was known to only a few, signet rings bore a distinguishing mark or badge that could be impressed on clay or wax to authenticate correspondence. Signets

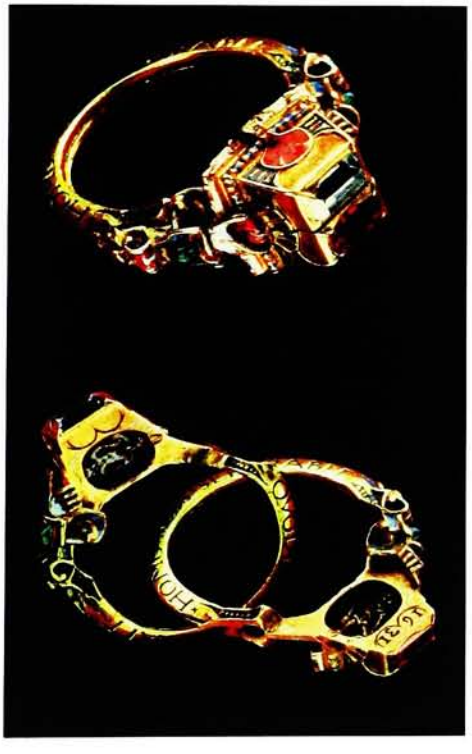
were essential for government and commerce, and were used on practically all documents in tenth- through twelfth-century Europe.

Wedding rings have also been an important part of human history for much of its existence. The wedding ring first became popular in Christian Europe during the seventh century. Wedding rings have always been placed on the fourth finger of the left hand, because in earliest times it was believed that a vein ran from the heart directly to that finger. Wearing a ring on that finger would bring your lover closer to your heart. Wedding rings today follow the same tradition, and we still wear them on the same finger.

During the fourteenth century, European men and women wore rings to show rank. In many cases a person of wealth could be seen with as many as fifteen rings on both the upper and lower portions of the fingers. Colored stones set in metal were the most popular style. Rubies were the most expensive of all stones, according to Benvenuto Cellini: "A ruby, for instance, [the size] of five grains of wheat and with as fine a fire as you could wish, would be worth 800 scudi, and an emerald of the same size and beauty would run about 400. Similarly, a diamond would be worth 100 scudi and no more, while a sapphire would fetch about 10." (A scudo was a gold coin worth about $140 in today's currency.)

The techniques of the goldsmith were at a high point: rings were made as artworks, and there were barely any bare spots to be found on them. Jewelers of the fourteenth century were known for the complexity of their creations, using chasing and enameling to show form and depth.

By 1600, the great age of the goldsmith was over and his place had been taken by stone cutters and setters. Many rings featured multiple stones instead of just one or two. Shanks became just a simple circle placed below the stones.



Mourning rings have been used for centuries, but they became especially popular after Queen Victoria had one made to commemorate her husband, Prince Albert, after his death. Moreover, rings were becoming increasingly affordable, so that middle-class people could honor their loved ones upon death. These rings were often designed before someone's passing, then left to a family member or dear friend. They were decorated with symbols of mourning and remembrance, such as the weeping willow, broken columns, urns, and classical figures, and were often personalized with the

name of the departed and his or her birth and death dates. One particularly interesting style of mourning jewelry is the locket ring: often this contained the hair of the deceased. The one shown here is a ring that has a white enamel memorial urn outlined with amethysts; the enameled shank is inscribed "AB OB MAY 19 1755 IF I FORGET THEE". When the ring is removed from the wearer's finger, it reveals a secret door that conceals a compartment filled with the loved one's hair.

The rings of the nineteenth century were amazing in their size and detail. They sometimes contained hundreds of stones, and covered the entire bottom portion of the finger. Jewelers had begun mass-producing rings from stock patterns: For the first time in history, rings were not just for the very wealthy. Since almost anyone could own a ring, the very rich needed to wear ever larger and more elaborate rings to show their status.

The *American Heritage Dictionary* defines "ring" as (1) "A circular object, form, line or arrangement with a vacant center", or (2) "A small circular band, generally made from precious metal and often set with jewels, worn on a finger." My definition is simply "a small object intended to adorn one or more fingers of the hand."

No matter how they are defined, finger rings continue to reflect the search for enriched forms of perception: a game based on symbolic

communication just as much as conceptual thinking. The ring today is therefore an expression of the living world.

The finger ring has been a form of social, political, and religious expression, but in all cases these objects were created with an obvious concern for achieving a pleasing appearance. An almost universal and fundamental need of human beings is the desire to stand out in a crowd, and by virtue of its beauty and expressiveness, the finger ring furthers this urge.

Finger rings today are given and worn to mark or remind us of happy events such as marriage, graduation, birthdays, a special trip, retirement, and so on—milestones that we are proud of and want the world to know about.

Materials for Construction of Rings

Gold

I have chosen four metals that I believe convey a strong message in all of my rings: gold, stainless steel, titanium, and aluminum. When combining these materials, it is not just the amalgamation of two different colored metals, but rather a modern material confronting the oldest metal in the history of mankind.

It is not clear who first discovered gold, but several mines have been discovered that date back to 5500 B.C. in southern Egypt. This has led

researchers to believe that ancient Egyptians were the first to extract gold and to use precious metals for making jewelry.

It is believed that the Egyptians who lived near the Red Sea and the Valley of Daghbeg were the first goldsmiths. Remnants of tools and ditches suggest that workers ground quartz containing gold into a fine powder. Water was then added to help dissolve the deposits. This mixture would then be poured into square basins to trap the gold sediment and leave it for collecting.

Although gold was very common in ancient Egypt, the use of it was reserved for the nobility. Egyptians referred to gold as the skin or flesh of the gods, and because of its color, gold was associated with the sun. Gold became the metal of choice for jewelry not only because it was relatively easy to manipulate, but more importantly, it showed rank when worn.

Gold is the most malleable and ductile of all metals. It is so malleable that one ounce of gold can be hammered into a thin, translucent wafer that will cover more than 100 square feet and be just five millionths of an inch thick. One thousand of these sheets would be needed to make the same thickness as a piece of newsprint.

Gold is also one of the heaviest metals known. Its specific gravity is 19.3, which means it weighs 19.3 times as much as an equal volume of water. One cubic foot of gold weighs 1,206 pounds.

The value of gold has fluctuated considerably over the years. In 1792, the U.S. Congress adopted a bimetal standard (gold and silver), with gold's value set at $19.30 per troy ounce. This remained essentially unchanged until 1834, when the price of gold was raised to $20.76. It stayed at that price for the next 100 years. It was not until 1934 that President Roosevelt devalued the dollar by raising the price of gold to $35 an ounce. Today, the price of gold is approximately $625 per ounce, an increase of nearly 20 times its price in 1934.

Stainless Steel

A French scientist, Leon Gillet, first invented rustless steel in 1904. It was first manufactured for use in gun barrels, but Gillet quickly changed the name to stainless steel in order to make his new product more appealing when selling knife blades. Today there are dozens of grades of stainless steel. For my project, I have chosen to use #316 stainless, a medical grade that contains 18% chromium, 8% nickel, and 74% steel.

The noncorrosive and rust-resistant properties of stainless steel revolutionized industry, and it became an essential material in food production, medical equipment, and transportation.

The surface of stainless steel resists oxidation at high temperatures, making the sterilization of medical instruments possible. The chromium in the steel mates with oxygen in the atmosphere to form an invisible, highly protective film of chrome oxide on the surface of the metal, which prevents rust or oxidation from occurring.

Titanium

Rev. William Gregor of England first discovered titanium in its impure form in 1791. It was later named titanium after the Titans, the sons of the gods of the sky and the earth in Greek mythology. It was not until 1910 that titanium was manufactured in its pure form by an American chemist named M. A. Hunter.

What makes titanium so superior to many other industrial materials is its strength, light weight, and corrosion resistance. Titanium can also withstand extreme temperatures and can be fabricated into a variety of parts. It is the only material known to be biocompatible with the human body.

Aluminum

Aluminum was discovered in 1746, but not used for fabrication until 1825. Aluminum is a naturally occurring element, but is never found by itself in nature. Aluminum is also the most abundant metallic element found on earth; practically all rock contains some aluminum in the form of silicate minerals.

In the 1800s, aluminum was the most sought-after (and thus the most expensive) metal, even more than gold, because it is difficult to separate aluminum from the other materials found with it. Public monuments employ aluminum to show rank and status: it is used on the roof of the Washington Monument in Washington, D.C.

Influences and Inspirations

When talking about the influences or inspirations for my work, it is impossible not to include my background. I come from a very conservative family that valued function and serviceability more than beauty and aesthetics. I grew up on the Oregon coast, and there was not a day that went by when my mother did not take me to the beach, which became a second home for me. I am both calmed by the movement and rhythm of the waves, and terrified by the remorseless intensity of the sea.

My father owned and worked a commercial fishing boat, with his major income coming from crabbing. During the spring and summer months, the yard at my house was filled with hundreds of crab pots, and my brother and I spent our summers repairing the holes in the wires caused by last season's fishing. One could say that this was my first experience with metalsmithing; it could also be where I acquired my love for geometric shapes.

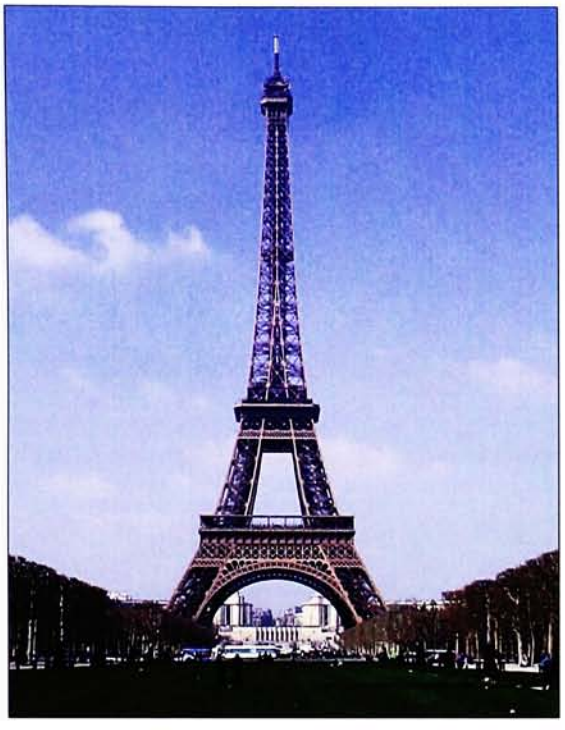
My father's boat is extremely functional, but within that utility there is beauty. The mast, a 25-foot-tall pole, acts as a high point to work from. Hanging from the mast are crab blocks and trolling poles. Crab blocks are large pulleys with motors attached that allow the crab pots to be raised from the sea floor and brought back into the boat. Trolling poles lower during rough weather to help stabilize the boat. All these items have cables and wires attached. The beauty and efficiency of this arrangement has strongly influenced my aesthetic toward designs of a more industrial nature, and cemented my belief that jewelry should not just be displayed, but should be worn and used.

My understanding of functional structures has led me to admire cable bridges like the Golden Gate bridge, located in the San Francisco Bay, and the Brooklyn Bridge in New York. The Golden Gate bridge is my favorite

artwork. What I find most striking are its geometric shapes and the industrial cables holding it together, how it flows with the bay and the surrounding hills, and how it functions as a conduit for 150,000 cars to pass over the bay every day.

Construction began on the Golden Gate bridge on January 5, 1933, and it was completed on May 28, 1937. It was designed and engineered by Joseph B. Strauss, the son of noteworthy artist Raphael Strauss. Joseph Strauss was born in Cincinnati, Ohio in 1870 and received his engineering degree from the University of Cincinnati. He died only a year after the completion of his magnificent bridge. Returning to his other great love, poetry, Strauss composed verse for the occasion, exulting, "At last, the mighty task is done."

Other public works, like the Eiffel Tower in Paris, have shown me that a shape as basic as the triangle can be used with repetition to create one of the most recognizable artworks of our time. The Eiffel Tower was built for the 1889 International Exhibition in Paris. Until 1930, the tower was the



world's tallest building at 300 meters. The tower was almost torn down in 1909, but was saved because of its antenna, used for telegraphy at the time.

Painters from the Futurist movement like Dumchamp and Maelvich, who both used geometry to depict space, time, and movement, have been integral in forming my aesthetic.

Marcel Duchamp was a master at depicting a figure in several moments at once. His output was small but controversial, and he exerted a strong influence on twentieth century avant garde art. Born on July 28, 1887 in Blainville, France, he was the brother of artist Raymond Duchamp and half brother to painter Jacques Villon. He used rhythmic lines in order to move the viewer's eyes through the picture. The picture shown here is *Nude Descending a Staircase* (1912).

Painters from the Renaissance will always be held in my highest regard. When I think of the years (in many cases) spent on creating a single painting, and the conviction it must have taken to complete these works, it makes me respect these artists all the more. Today we live in a world of instant gratification. If a piece of art takes a week to produce, that seems like much too long a time. This is disheartening to me.

Rogier van der Weyden took three years (1452-55) to complete his masterpiece, *Altarpiece of the Seven Sacraments*. The finished triptych measures 78-3/4" x 38-1/4" (center piece) and 46-7/8" 24-3/4" (each wing).

Van der Weyden had a remarkable ability to capture three-dimensional space on a flat plane. This nave, with all the gothic arches and beams shows off his talent for making a two-dimensional form seem three-dimensional. This unusual arrangement of the seven sacraments, which appear simultaneously within one setting, is what appeals to me. Furthermore, even though the painting is quite detailed and

presents a lot of information, I feel a stillness and quietude when I examine it. Although I have no religious background, I feel more grounded when looking at sacred paintings from the early Renaissance.

Finally, I am also highly influenced by the metalsmiths of the 1960s. For the first time in two hundred years, metal again was the focus or most important part of the rings created during that era. The artists marked their individuality by expressing themselves in metal, the designs being influenced by the stones being used, but not relying solely on them.

I want my work to be touched and embraced, but most importantly, worn. Therefore they must be primarily inventive and engaging. I chose to use softer finishing on my rings, like sandblasting and scratch texturing, to give the rings a more tactile quality and to make the geometric lines more welcoming. Almost all these rings physically stand on their own: I created them that way deliberately because the rings in this series are sculptures and are meant to be viewed from all angles. In addition, I desired that these rings be loved even when they are not being worn. Instead of placing them in a box, I wish to have them displayed for everyone to see.

I want to move away from the impersonal setting of stones and pearls and make the metal the important component of the work. The uses of stones

and pearls represent the wearer, or rather the emotions the wearer goes though over the course of his or her life.

These rings all speak about my own desire to be set free from my past, but at the same time to feel safe and protected and to realize that having a home (whether good or bad) is better than having none at all. I feel all the rings verbally communicate this tension though the uses of metal. I chose to use stainless steel, titanium, and aluminum, all three of which are cold and hard metals associated with industrial uses, hard to work with, and not employed to make jewelry. These metals have been softened slightly by the use of gold—just enough to make them engaging. Gold is the most "human" of the metals, offering serenity and approachability. Looking back though the history of art, gold is almost always paired with a god or gods, heaven, or rewards we will receive, thus invoking feelings of warmth and home.

Figure 1, *Beach*, is the first ring I created in the series. It is made of 18k gold, nickel silver, glass, sand, and pearls. Since it was the first ring I constructed, it is possible to see how my ideas and aesthetics evolved over the course of the year. I decided to use 18k gold and nickel silver together because using a metal with a lot of value and combining it with a very inexpensive metal brings up the question of whether the value of the piece is due to the price of the material or because of the craftsmanship and artistry.

I completed this ring by cutting out a die from Plexiglas, then hydraulically forming each side, then finally soldering the two surfaces together. This left the ring with a hollow center, which is filled with two glass tubes containing sand. The sand is from a beach in Brookings, Oregon that my mother took us to every day when I was a child. This beach holds many happy memories for me. There are three pearls set on the inside of the ring, so that when the ring is being worn the wearer's fingers don't touch the metal, just the pearls. Of all the rings in the series, this one holds the most meaning for me, and it is my favorite. Not because it is aesthetically better then the others (in fact, to me it is one of the least pleasing to the eye), but rather because it holds feelings of happiness and bliss, an emotion I didn't often feel as a child.

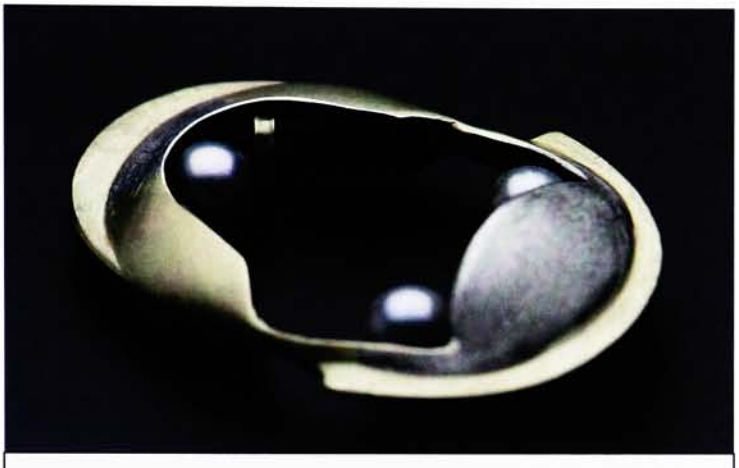


Figure 1

The ring I call *Bound* (Figure 2), is constructed from 18k gold, nickel silver, and a single diamond. These materials came from my mother's engagement ring. She is still married, but I never remember a time when she wore this ring. This ring is made by taking the old band and rolling out the

gold into thin square wire and crafting a cage out of it that houses the diamond. The diamond, which in this case represents my mother, is not held tight, nor is it set free, but it is allowed to move from one end of the cage to the other. The band resembles a band holding the cage down to the wearer's finger. This ring shows that to be bound to someone else can be exceedingly comforting.

Figure 2

Figure 3 shows *Trapped*, which is fabricated from 18k gold rectangular wire and platinum with a tanzanite stone. The overall feeling of this ring is that being trapped can surprisingly beautiful. The stone, which represents the wearer, is held in place by moving the top two bars over until the stone can no longer come free. I made the choice to set the stone in this manner to give the appearance that the walls are caving in around the person. For the first time in this series I left an opening that serves two purposes: to give the viewer's eyes a chance to rest, and to allow the

Figure 3

stone (person) a possible route of escape. I believe that we always have a choice, even if the options are not always appealing. The use of strong geometric shapes reflect the influence that industrial bridges and buildings have had on me.

Figure 4

Figure 4 sets the tone for the rest of the series. Instead of using primarily gold with accents of other metals, I switched to stainless steel, titanium, and aluminum as the root metal. *Dwelling* is manufactured of stainless steel, 18k gold and a sapphire, formed in the basic geometric shape of a square, with a small hole in the bottom for a possible route of escape. The top of the ring has a small track that allows the sapphire to move from left to right. The making of this ring brought up some technical difficulties; I had problems getting the stainless steel and the gold to solder together. I switched to a flux that contained fluoride and from that point on I had no problem getting the solder to flow.

Figure 5, titled *Constrained,* is assembled of stainless steel, 18k gold, and pearls. Its rudimentary parallelogram shape illustrates a feeling of substance and dominance, while the gold wire that flow though the middle

Figure 5

introduces a suggestion of movement. There are two pearls, one that is fixed on the inside and the other that is free-floating on the wire on the outside. *Constrained* really shows how protected the pearl on the inside is compared to the vulnerability of the outside pearl.

Figure 6, titled *Guarded,* is constructed of aluminum and 18k gold with the outside shape of a wedge. The difficult part of this ring was connecting the gold to the inside of the aluminum, since you cannot solder the two together. My solution was to bore holes in the aluminum and rivet the gold in place. This ring again captures the sense of safety and comfort there is in being guarded and bound to something else.

Figure 6

Figure 7, E*mbraced,* is created with titanium and a pearl. The titanium is anodized with 12 volts to produce a deep purple effect to reflect the purple undertones of the pearl. This ring differs slightly from the rest for two

Figure 7

reasons: first, it does not stand on its own, and second, when the ring is worn it is the finger that constricts the pearl and does not allow it to be released.

Figure 8, titled *Sanctuary,* is made from stainless steel and 18k gold, shaped in a square with two small legs that start to form a circle coming off the bottom of the ring. I chose these two shapes to symbolize how a person's surroundings can change from something harsh (square) to something gentle (circle). There are two identical gold straps, one on the inside and the other on the outside of the ring. These are in place to illustrate the feeling that when you are inside all you want to do is get out, but once you are on the outside all you can do is aspire to get back in, remembering how good it was.

Figure 8

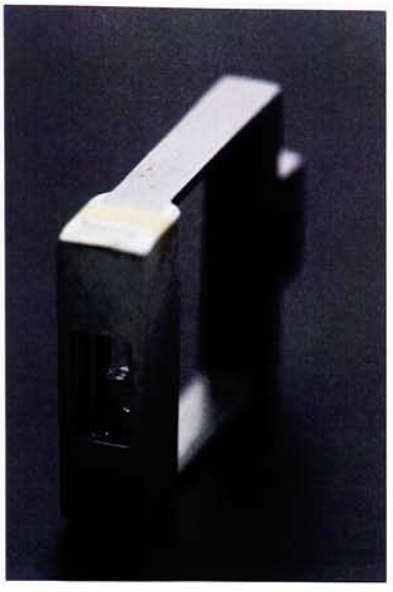


Figure 9

Figure 9, *Confined,* is completed with stainless steel, sterling silver, 18k gold, glass, and diamonds. The basic shape of the ring is a square, with a small rectangular foot on the bottom, that raises this ring just enough to give it a lighter feeling. The top portion boasts a sterling silver rectangle with a small window that exposes a glass tube filled with 26 diamonds that are all free-floating. I chose that number to represent the number of years I have felt confined in my own life.

Figure 10, *Ensnared,* is made of titanium, 18k gold, and a raw diamond. This ring was developed with titanium, because this is the only metal with the strength to hold up to the thin swirl pattern I needed to illustrate the feeling of only a little bit holding you down. At the base of the ring is a small gold circular cage that holds an uncut diamond.

Figure 10

Figure 11

Figure 11, *Protected,* is made from stainless steel and 18k gold. The body shape is a square that stands at a 45 degree angle. It supports the idea of movement, and makes the piece not so stagnant. The top corner has a gold cage that encloses itself. There is a slight hole in the cage that opens into the opening on the top of the ring. This gives the viewer the hope of being liberated.

Conclusion

The rings I have created don't just tell my story and the way I feel about the world around me, but rather they reflect to the human story: Finding our fundamental need for comfort in being bound and realizing that the cages we build for ourselves are more about security than constriction. The common connection that links all of my rings is that the artificial cages that hold humans from being limitless are very small, and we can all transcend them if we choose. In conclusion, we all seek refuge in confined surroundings and dwellings and find ourselves more at home there, even though bound, than we do when we are free and alone.

Bibliography

Finger Rings
James Fenton, Diana Scarisbrick, Martin Henig
University of Oxford
Ashmolean Museum, Oxford, 2003

Historic rings: Four Thousand Years of Craftsmanship
Diana Scarisbrick
University of Oxford
Ashmolean Museum, Oxford, 2004

The Power of Gold: History of Obsession
Peter L. Bernstein
John Wiley and sons Inc., 2000

A Short History of Twentieth-Century Technology
Trevor I. Williams
Oxford University Press, 2002

Rings- Symbols of Wealth, Power and Affection
Diana Scarisbrick
Harry N. Abrams Inc. Publishers, London, 1993

Northern Renaissance Art
James Snyder
Prentice Hall Inc. and Harry N. Abrams Inc., London, 1985

The Complete Book of Heraldry
Stephen Slater
Anness Publishing, New York, NY., 1999

The Cubist Epoch
Douglas Cooper
Phaidon Press Inc., New York, NY. 1971

History of the Wife
Marilyn Yalom
Harper Collins Publishers, 2001

Engineering in History
Richard Shelton Kirby, Sidney Withington, Arthur Burr Darling, Frederick Kilgour
Dover Publication Inc., New York, NY. 1990

History of Jewelry
Joan Evans
Dover Publication Inc., New York, NY. 1970

Amulets and Superstitions
E.A. Wallis Budge
Oxford University Press, London, 1930

History of Precious Metals From the Earliest Times to the Present
Alex Del Mar
Elex Del Mar, New York, NY., 1901

The Role of Metals in Ancient Greek History
Michail Yu Treister
E.J. Brill Inc. Leiden, Netherlands, 1996

The Eiffel Tower
Luccien Herve, Barry Bergdoll
Princeton Architectural Press, New York, NY. 2003

Ancient Egypt a Social History
B.G. Trigger, B.J. Kemp, D. O'conner, A.B. Lloyd
Cambridge University Press, London, 1983

Modern Art 1851-1929 Capitalism and Representation
Richard R. Brettell
Oxford University Press, Oxford, NY., 1999

Jan Van Eyck- The Play of Realism
Craig Harbison
Reaktion Books Ltd., London, 1999