

**ART**  
**YOU CAN**  
**CREATE**  
**THAT**  
**MAKES MONEY**

BY  
PHILIP VICKERS

## **Dedication**

This book is dedicated to my wife, Barbara, who devised many of the techniques described in this guide, as well as editing the manuscript for grammar and punctuation. Her artistic talent, sense of color and infallible good taste have lead to much of the success my works have enjoyed. Her patience and encouragement, too, have added immeasurably to the completion of this guide.

## **Acknowledgments**

I owe special gratitude to Jim Smith, George Sinka and Leslie Menninger for their assistance in leading me successfully through the computer minefield. With their help I was able to avert total disaster on many occasions.

Also, thanks to the many sculptors, designers and craftsmen all over the United States, in Canada, Europe, the Middle East and Asia who, having viewed my Web site and e-mailed their requests for more information, propelled me into putting my sculptural experiences on paper.

## Introduction

If it weren't for my having a Web site on the Internet I probably would not have written this manual. But I have a Web site, [www.sculptureunltd.com](http://www.sculptureunltd.com), and as a result, when you scroll the 50-60 pieces you will see sculpture unlike any other sculpture you have ever seen before. I don't mean you will see wildly fanciful or outrageous sculpture. You won't find the huge bronze metaphors of Henry Moore or the playfulness of Alexander Calder's wire mobiles. But what you will find that is totally unique is sculpture in metals of many colors.

For example, you will see Grand Canyon panoramas and tiered mountain ranges in lavender, crimson and orange; you will see Mojave Desert sand dunes of yellow brass in deep blue shadow and remnants of the Old West in heroic-sized cowboy and Indian faces of bronze and silver. New Mexico's old Taos pueblos appear in faded copper with green mountains on the horizon followed by blue and green waves of the Pacific rolling in under a tangerine sky. The purple pillars of Monument Valley fade into the distance and the brick red cliffs of Canyon de Chelly precede pretty Indian girls with pink blankets, silver and turquoise jewelry. Even abstracts, inspired by the towering red rock buttes and minarets that distinguish my little town in Arizona are all pictured in multi-hued polished metal.

Since almost three thousand of these pieces have been sold in art galleries, I foolishly expected all the pretty pictures on my Web site to attract hundreds of new buyers. Wrong! Instead, they turned out to be a magnet for sculptors, graphics and furniture designers, screen printers, interior decorators, display designers and architects all wanting to learn more about "those colorful metals".

Frankly, I was delighted that such a variety of creative and talented people, whether they approved of my sculpture or not, nevertheless recognized Matrix Metal for what it is...a 21st century, state-of-the-art technique with a hundred uses.

Their e-mailed questions, from every corner of this country and as far away as China, were aimed at the possibility,...and the hope, of using Matrix Metal in their various professions. "How did you create pink, green, blue and lavender metal? Are the metal powders fine enough for screen printing my designs on tables and doors? Is it possible to cast wall size relief sculpture in these metals? Can a small woman physically handle the molding and casting alone? Do I need a large studio and lots of money to get started?" ...were a few of the many questions that appeared on my computer screen.

My answers, reassuring as they were that the materials are inexpensive and light weight, that a garage or basement is space enough to get started and detailed explanations about the ease of creating new metal colors, screen printing and stenciling on furniture and architectural panels, I realized there was still much information that I needed to share if I sincerely wanted to introduce Matrix Metals to the world. So I wrote this manual because it should be written and because I believe I am the most experienced and qualified person to write it.

By following my detailed instructions carefully, there is no doubt that many thousands of creative people who are in business or the arts and crafts will find new avenues of self expression and financial gain. And that will please me greatly.

Philip Vickers  
Sedona, Arizona  
July, 2000

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# PART

1

## Chapter 1

"Treat All Skills Taught As Penetrations  
Into the Mysteries of Creativity."

*Henrick van Loon*

### **Creating Objects of Beauty**

Objects of beauty are easy to create. They enrich people's lives and they are also financially rewarding. These are facts that will be proved to you in this book. But you will be learning much more...about new art media and materials, new skills and techniques that will put you solidly on the road to *creating objects of beauty that sell*. Whether artist, craftsperson or both, you will soon begin to enjoy the daily challenge and excitement of creating sculpture for galleries, designing colorful metal panels for show-room furniture and enhancing every day objects with beauty. You will be well paid for your effort and many lives will be enriched. Be assured too, that the life you will enrich the most, will be **your own**.

I make these claims as a self-taught artist of unlimited persistence who, during the past 50 years has created scores of sculptures, crafted hundreds of decorative (sometimes elegant) art objects, invented an advanced and improved technique for casting sculpture and introduced several new and profitable forms of artistic expression.

Over the past half century I have read hundreds of books on the **how-to** of every conceivable sculpture technique, but not one author explained **what-to** sculpt that is guaranteed to make money. Not one was even remotely specific about the themes and the sculptural subjects that sell.

My approach is going to be very different. I am going to get very specific about **what** to produce and **how** to produce it to get the most sales. I am going to help you become your own boss in your own profitable business so that you, too, can experience the exhilaration of calling the shots yourself and reaping the rewards of investing in yourself.

So, if you are looking for a book that will explain the creative process or forecast the next artistic trend, this book is not for you. For such information you can read Roger Fry, art history or art theory books. **This book is about making a very comfortable income well into the future, doing what you enjoy.**

I was 45 years old with a wife, three sons and a mortgage when I was finally able to give my full attention to sculpture. I had to start making money almost from day one and a Trademark on the name "Matrix Metal" was just about my only asset.

For the next 17 years I produced sculpture strictly by commission for museums, architects, corporations, government agencies, interior decorators, banks, schools, churches and private citizens. Those were my "art school" years, but I learned more than any school could teach me, especially about the "business" side of being a full-time, self-employed artist; i.e., bidding, contracts, deadlines, billing, establishing credit, materials sources, etc. There is a world of difference between producing art on week-ends for personal enjoyment and producing art that brings in enough money, month in and month out for 17 years. The latter is infinitely more challenging and is guaranteed to keep you young.

But it is gallery sales of my work for the past 20 years that have given me the most pleasure and really opened my eyes to the financial rewards of producing sculpture for the general public. **Now I want only to share my experiences and knowledge with a new generation of younger, aspiring and deserving artists.**

Many of you will be "early retirees" in your 50's or 60's, finally with the time to pursue a long suppressed desire to express yourselves artistically or, for those of you with business experience as well, to start an exciting and profitable new career. You, too, will find that the techniques explained in this guide will end your search.

### **Discovering Your Ability to Create Beauty**

You have the soul of an artist and this book was written for you...if you are happiest when working with your hands to fashion anything that is pleasing to your eye, anything that transports you into a world of beauty that you want to share with others, anything that makes you proud and piques your self-esteem. You may not have been born with the ability to produce great art, but the aesthetic sensitivity is there and the ability to be touched is close to the surface. So, whether you are moved mostly by form, texture, color or a combination of all three, this book will help you discover your ability to create beautiful art **and sell it.**

### **Easily Made Wall Sculpture**

In the next few chapters I will show you **first how to create gallery quality sculpture that is not only unique, but has a proven sales history in the thousands.**

I believe I am well qualified for this task for several reasons: (1) To my knowledge, I am the only sculptor in the world who has succeeded in breaking the subject barrier by creating landscapes and seascapes and (2) invented and introduced a means of casting sculpture in a variety of bright, colorful metals replacing the bland, expensive bronzes of old. \_\_\_\_\_

With the help of this guide you will be able to produce gallery sculptures by recognizing and creating in clay the interesting subjects that are all around you, how to reproduce them inexpensively in colorful Matrix Metals and how to place them in successful art galleries. You will also learn how to design a winning brochure and how to keep records of formulas and sales.

### **Printing in Metal**

For those of you who are also interested in embellishing your home furnishings with beautiful metal inlays, I will explain in detail how your drawings, graphic designs or any kind of artistic concept can be printed or stenciled in metal and then converted to stunning interior decorations on walls, tables, doors, planters and pedestals. I am convinced that a line of furniture embellished with panels of colorful metal inlaid drawings and graphics would be an overwhelming success with home beautifying consumers that are always on a quest for the new and different.



## Architectural Panels

If you are not only artistic, but also have a good head for business and are interested in the highly commercial use of Matrix Metals, then you may want to go into the production of architectural panels for offices, banks, airports, restaurants, and other commercial applications, *coast to coast*.

I created textured bronze panels and logos for half a dozen banks, two-tone brass and nickel-silver panels for apartment buildings and an 8' x 16' ornamental bronze wall for a conference room. I had a wonderful time inventing new metal color combinations and blends, raised textures and installation techniques and I would be doing it still if I lived in a large city.

With only *one* other competitor in the whole country, the opportunities for selling colorful graphics and textured architectural panels in all the fifty states are endless. In this book I will gladly teach you my fabrication methods.

In this chapter I will explain, too, how the interior designers and architects among you can custom-design subtle shades of metal that will match colors in upholstery, fabrics and carpets.

### What Makes this Book Different

This is the only book, to my knowledge, that teaches the reader new techniques for **creating, reproducing and selling** art.

This book makes no effort to teach you how to be an artist, only how to create art that will compete successfully in the market place. I know many talented artists, both painters and sculptors, who have never found galleries that will exhibit their work. They blame the galleries for not recognizing their talent or they refuse to produce art that the public wants, preferring to "do their thing" whether it has any commercial value or not. There are "artists" who prefer to work a 9 to 5 job five days a week, pursuing their art only on weekends ... thereby qualifying as "victims of the system" or "misunderstood".

I must tell you I have no patience with these people. Art, to me, is a commodity ... that must compete with thousands of other consumer items and must, therefore, perform a benefit. No one *needs* art in the same way that we *need* food to survive. But art that gives pleasure through lifting the spirit, stirring the imagination and evoking dreams will feed the soul. *In this book you will learn how to create art that feeds the soul and the body and you will make money creating it.*

In all these chapters, you will learn from detailed, step-by-step explanations of new artistic skills that will bring you personal and financial success. Once you have learned to use these new materials in these standard and basic ways, I predict your own creativeness will begin to widen and expand on these ideas.

Let us move on now to the first step in your journey towards your goal as a creator of beauty in many forms.

## Chapter 2

### **Let There Be Sculpture**

It is very important to me that all of you who read this book know from the start that I was not blessed with artistic talent at birth nor was it ever revealed to me in a sudden flash of creative inspiration. Whatever personal fulfillment or financial success I may have achieved was hard won, the result of persistence and quenchless curiosity. The search for a purpose and meaning in my life was long and arduous, probably similar to the search thousands of you are going through today...seeking a medium in which your creative instincts can find full expression.

Perhaps during your search you have learned that the carving of marble and wood is ponderous and limiting in scope; that constructing abstracts of welded steel requires an outdoor studio and heavy, expensive equipment with the potential for very little gallery or public demand; that casting your work in a bronze foundry can have crippling over-head expenses. The basic drawbacks with all these sculpture techniques are these:

1. Carvings ... facsimiles cannot be made in the same material as the original. Bronze, synthetic marble or concrete copies of a stone carving are unsuccessful and the same is true of carved wood. The results look artificial and forced.

2. Constructions ... are one-of-a-kind, so you have to retrieve all your material and labor costs and your profit with the money from one sale. Real money can be made, of course, from "constructions" when, as a famous sculptor, you make only the scale model and pay an "enlarger" to provide the blow-up.

3. Foundry casts ... reproductions are possible but very expensive. The lost-wax process requires weeks to complete the many stages necessary for molding and casting and the cost is high. French sand casts, when you can find someone who knows how to do it, are less expensive, but very heavy.

As you can see, none of these sculpture techniques lend themselves to inexpensive reproduction and that is the whole point of learning to use Matrix Metals. So, it is vital that you grasp the following principle now and keep it firmly in mind: The key to making money from your artistic creations is the ability to reproduce them inexpensively by yourself and in large numbers. This is true whether we are talking about books, automobiles, CDs or the daily newspaper. Therefore, if you are really serious about finding a medium that is free of all the negatives associated with the art forms listed above, but with many positives, then please read on. Because it is for you that I am writing this book.

### **Everyone Has a Unique Talent for Something**

The enormous waste of human potential is one of the great evils in today's world and I am convinced, after observing life from a variety of perspectives for four score years, that each and every one of us on this planet is capable of making a contribution that would benefit mankind. If there is a meaning to life, if we are indeed put here for a purpose, contributing to the betterment of mankind surely must be it. Of course, millions of people have made a contribution but, sadly, many millions more have not, nor will they ever, realize their unique talents.

If we are ever going to curb the squandering of human potential, we desperately need to find a means of discovering individual aptitudes and abilities at an early age so that we can guide each person towards achievement and self-fulfillment. Tens of thousands of young men and women, all with untapped abilities, are wasting their lives in jail or wandering aimlessly from job to job. Early screening and talent assessing would find that all could have been guided into productive channels ... particularly the arts and crafts ... in glass, wood, stone, metal, ceramics, fibers, acrylics, paint or plastics. The universal need for self-expression is easily matched by public demand. African and Native-American, Hispanic and Asian communities here in North America are just beginning to realize that a profitable career in sculpture is no longer for the Caucasian man and woman only. Ethnic and minority themes are daily in greater demand in big city galleries across the country.

### **Ideas Everywhere**

When I first discovered the fascinating world of sculpture in London about 50 years ago, it was the challenge of recreating the human face that interested me initially. Inspired by Jacob Epstein, an American expatriate who had built an excellent reputation for his portraits of well known people, I decided to follow his example. My first half dozen attempts were modeled in styles reminiscent of Epstein, Rodin and the great Yugoslavian artist, Ivan Mestrovic. It took me two years to complete them, having first poured over pictures and studied Rodin's work at the museum in Paris and having traveled to Split to view the bronzes, wood carvings and charcoal drawings by Mestrovic that filled a museum on a mountain top high above the Adriatic.

When my portraits of Air Vice-Marshal J.E. Johnson, fighter ace of the Royal Air Force (and my former Wing-Commander), Hubert de Givenchy, Paris fashion designer and Sir Barry Jackson, famed London theatrical producer, were submitted to the judges, I was invited to exhibit with the Royal Society of Portrait Sculptors.

Soon after the exhibit however, I produced several pieces of sculpture that I hoped would erase the burden of certain spiritual, emotional and mental scars stemming from my four years as a war-time fighter pilot. Admittedly passionate and filled with rage, the sculptures were great therapy, but no art gallery would touch them and I despaired that I lacked the vivid imagination I thought necessary for a successful career as a gallery artist in the big European capitals.

Soon I returned to this country and for the next 17 years produced sculpture solely "by commission" until, on a business trip to Arizona, I saw for the first time galleries filled with *representational* instead of *abstract* art. Here was my kind of art. It reflected reality, the themes were recognizable and at the same time much of it was moving. On that day I learned a momentous lesson: You don't need to *invent* subject matter, ideas or themes ... You are surrounded by them. They are everywhere. In the next chapters, I will detail the financial advantages of modeling *familiar, everyday scenes* in relief and *producing large editions of "sculptural prints"*, priced so that both you and art galleries that show your work will make a handsome profit.

## Chapter 3

### **Why Bas-Relief ?**

Since the only reason for writing this book is to lead sculptors step by step to the point where they will be financially secure and able to pursue their art full time...this first step is crucial to your success. Start now to create your images in bas-relief. This guide will show you just how interesting and easy that can be. There are many good reasons for you to work in relief, the most important being these:

#### **1. More Story Elements Possible**

Any subject you choose, whether it be Americana, famous people, landscapes, military scenes, sports art or any number of other possibilities (Art By Subject, see list in Chapter 4), can be given more scope and breadth...more "sweep" if you will, tell a lengthier and more interesting story if your idea or concept is expressed as a three-dimensional wall-painting. Consider for a moment the freedom of expression that painters enjoy. They can take their tubes of paint, brushes, canvas and an easel to a mountain top, a rugged coast, a quaint fishing village, a desert or canyon and then recreate the scene before them, extending all the way to the horizon. By working in relief you can do that too, only better, because you'll be working in three-dimensions...therefore truer to the original. The painter has been able to show people in a thousand diverse activities, which you can now do more realistically in bas-relief. And, with the use of Matrix Metals, you also have color.

#### **2. No Need for an Armature**

Another good reason to work in relief is that there is no need to build a complicated armature to support the weight of your clay. I suppose some sculptors enjoy spending hours bending lengths of iron pipe, tubing or wire to construct an armature. Yes, I've done it for 10'-12' free-standing outdoor pieces. But for gallery bas-relief sculpture, it isn't necessary. I like to get straight into modeling the clay and I can do that with a minimum of fuss by simply setting a plywood panel on my easel.

#### **3. Quick, Inexpensive Molds**

You have just saved yourself hours, if not days, by eliminating the need for a complicated armature on which to build your creation. Now, get ready to save a lot more time and money in the molding process...a maximum of a few hours of your time and a materials cost of between \$50 and \$150. Compare that with waiting several weeks and paying perhaps \$500 to go through the molding process of a complicated "in-the-round" sculpture in an art foundry. When you are trying to make a living; just out of art school perhaps, or stuck in a dead-end, non-creative job, being successful in the highly competitive art game is already hard enough. So you need to know and practice time and money-saving short cuts.

#### **4. Quick, Inexpensive Casts**

Now, because your sculpture is in relief and you have an open-faced mold, casting is also going to be simple and inexpensive. Even if the scene you have created on your panel requires several different colors of metals, you can still complete the entire casting and finishing process in four easy stages in roughly 3-5 hours and at a cost in materials of less than \$100. Yes, less than \$100.

#### **5. More Gallery Exposure for Less**

Another very important plus resulting from your working in relief is this: Since it has cost you so little time and money to create, mold and cast your sculpture, you are therefore financially able to make a dozen copies for a dozen galleries. Exposure is the key to selling. A dozen galleries affords you 12 times the exposure you would get if you were spending \$1000 on each cast and could afford only one cast and one gallery at a time.

#### **6. Inexpensive Packaging and Shipping**

Because your wall sculpture is a bas-relief (probably 2-4 inches deep), it can be packaged and shipped easily and inexpensively. All of my works, even the few that are up to 7 or 8 inches deep, are wrapped in "bubble wrap", placed in my own custom-made cardboard cartons and then stuffed with newspaper, rubber carpet underlayment, more bubble wrap, etc.

I never use Styrofoam "peanuts" and I hope you won't. So called "professional" packers of objects d'art seem to favor these messy, maddening Styrofoam crumbs, but since you will be doing the packaging yourself less expensively and putting the savings in your pocket, you can use whatever packaging material is at hand. I buy 4x8 ft. sheets of cardboard in bundles of 20. The art supply house delivers them to my studio door for about \$50. You can also buy a roll of bubble wrap 250 ft. long by 2 ft. wide for \$40... delivered.

These are your two major packaging expenses and they are good for dozens of cartons of low-relief sculpture ready for inexpensive shipment by UPS. If, instead of having used the bas-relief format, you had created free standing, in-the-round sculptures in bronze, stone, ceramic, etc., you would have had to build heavy and expensive wooden crates. The combined extra weight of foundry cast and crate would then demand the higher cost of a freight company instead of UPS and, once again, your profits are being gobbled up. Oh yes, I almost forgot insurance costs, but I'm sure you get my point.

#### **7. No Pedestal Required**

And finally, wall-sculpture, like a painting, does not require a pedestal to display it. Floor, table and wall space is always a consideration when buying art for a home or office and, with millions of people living in apartments, finding floor space for a pedestal is often a major problem. For every 50 painters showing their work in art galleries there is possibly one sculptor...simply because sculpture up to now has been a far more complex and costly art form that also requires more time to master. Consequently, the purchase of two-dimensional art in the form of paintings, lithos, serigraphs, prints, etchings and drawings out-number the sale of three-dimensional, in-the-round sculpture 50 to one. However, your bas-relief sculpture in Matrix Metal (the sculptor's equivalent of a painter's prints) will weigh and cost about the same, but have the added advantages of bringing depth and deep texture into the room.

To give you an example; a collector of my work, whose adobe style house is certainly large enough for pedestals, bought eight of my Southwestern wall pieces. "Cheyenne Chief", four feet high in feathered head-dress is attached to the outside wall next to the front door. In the foyer, my melancholy Morning Star, mounted on turquoise suede and lit from above, is set into a niche. Six more scenes of canyon, desert and red rock formations hang on the walls in adjacent rooms.

There is no doubt in my mind that the Indian portraits and Southwestern scenes priced reasonably, *thanks to working in bas-relief and casting in Matrix Metals*, made these eight sales possible for the benefit of both collector and myself...at absolutely no loss of floor space.

There you have the seven principle reasons why you should express yourself in bas-relief. Many of you are accustomed to thinking of sculpture only in terms of free-standing human figures, animals, metal constructions, etc. and you are not used to visualizing your ideas coming to life as a wall mural. But, the benefits of working in relief are so compelling that it will be to your great advantage to make the necessary mental switch now. Read the seven points listed above again and again until you are convinced, because therein lies the secret to both your fulfillment as an artist and your financial independence.

**Again, the arguments for you to work in relief are as follows:**

1. You will have many more choices of subject matter.
2. You will be able to tell a more interesting and lengthy story.
3. You will be able to finish your creation quicker, no armature needed.
4. You can make the one piece, open mold inexpensively.
5. You can make all of the casts inexpensively.
6. You can do your own packing and shipping for less.
7. Your work will be in more galleries...leading to more sales.
8. Your buyers will need only walls to display and enjoy your work.
9. You are totally in control of all phases and costs of reproducing your work.

## Chapter 4

### **Choosing Subjects That Will Sell And Where to Sell Them**

#### **Pick a Category for a Series**

Before starting any of the works you hope to sell, you must first decide on a category of subject matter that interests you. Since your aim is to produce a body of work that will be recognized as uniquely yours, consistency in subject matter is one of the essentials. Therefore choose a subject that you deem worthy of your time and that you find engrossing. Address a subject that will challenge your ability and hold your attention during the weeks or months that it may take to finish a series on this subject - and I strongly advise a series.

For example, let us assume you are a dog lover. You own several dogs, are familiar with various breeds and probably have a collection of beautiful pictures of dogs. With your understanding and empathy for dogs, that would be the obvious choice of a subject and one in which you will lavish the patience necessary to create successful portraits. You could become the preeminent sculptor of dogs...just as Landseer was famous for his knowledge of horses and Audubon was the authority on birds. This is not a bad category, incidentally, since there are millions of people in this country who keep them as pets, breed them as a business, spend huge sums on grooming, food and toys and probably would spend large sums of money on related art. And there are scores of breeds on which to hone your modeling abilities and train your eye for significant detail.

#### **Create a Logical Setting**

But a word of caution here. Don't put **just** the dog in your "picture". The dog by itself is not enough to make an interesting wall sculpture. The dog, cat, horse, bird or whatever animal you choose---must not be alone and it must be doing something. There should be drama and action in the scene. The dog could be chewing on a bone or a slipper, a puppy could be peeking out from behind the corner of a chair...or one of a litter. There must be animation, action, a story in the telling. I remember seeing a small bronze sculpture in a local gallery recently where the sculptor had combined his love of cats with a fondness for all things western. A worn cowboy boot was lying on its side and out of it an adorable kitten was crawling - an excellent example of story telling. The gallery probably couldn't keep up with the demand.

Now an example of what not to do: Some years ago I met a very talented sculptor whom I commissioned to produce several reliefs for me...two of which were Mythological Animals. As expected, he did a beautiful job on both the "Griffin" and "Unicorn" so I made molds and casts (he got a nickel-silver cast of each sculpture) and the agreement was that he would get a royalty on all sales.

I moved to Arizona and eventually placed them in a gallery that specialized in animals and wildlife. A few of each were bought by appreciative collectors but not nearly as many as I expected and, after comparing them to the wildlife paintings of Seery-Lester, Bateman and others, the reason became pretty obvious. The images lacked *atmosphere*. There was no *mythical environment* or *habitat* in which such creatures would logically exist. I learned from these successful painters that animals, whether domestic or wild, are invariably placed in their natural environments. Elephants, rhinos, lions, etc., are always situated in a typical African ambience. Wolves, moose and bear are shown in forests, lakes and mountains. The lesson is this: Whatever breed of dog you sculpt, give it an appropriate home; one in which it looks natural. Study the terrific work in WILDLIFE ART magazine for ways to handle this.

My advice about creating an ambience around your subject applies equally to any theme you may choose. Let us suppose you are a *military history buff*; that you know a great deal about tanks, aircraft and other weapons of war and, hopefully, even the names of several galleries that sell military art. You would certainly not depict just the tank on your panel no matter how accurately reproduced. But, by incorporating it in a realistic battle scene, you will compel the viewer to become involved in the action. Aviation art, based on the danger and high drama of aerial combat, is rapidly growing in popularity.

Up to the present time only painters have recreated with marvelous realism the life and death scenes of military aircraft in action. But a talented sculptor, working in relief and using the Matrix Metal or glazed Matrix Marble process, will someday bring those stories even closer to reality. That sculptor could be you.

### **Landscapes**

Landscapes, for example, become much more interesting if you can create a scene with depth. For centuries, painters have done it with perspective. Now we sculptors, using relief techniques and subtle gradations in metal color, can also achieve the illusion of great depth. My first experiments with the illusion of distance and depth in my landscapes resulted largely from an observation about color I made many years ago while driving east at dawn toward the Vermillion Cliffs in northern Arizona. The sky was a brilliant blue in the distance with several ranges of mountains in the foreground, each of which grew progressively darker. The nearest range was the color of burgundy, gradually moving back to lavender then copper and lemon yellow before fading into a blue sky. It was a gorgeous sight and I would have given anything for the talent to paint it. "That's where painters have it over us", I thought. "Sculptors can't create a beautiful sunrise or sunset, crashing waves on a rocky coast, snowcapped mountain peaks, burning deserts and deep canyons. Nobody ever heard of a landscape sculptor", I mused, "but maybe it's time they did".

When I got back to my studio I set to work blending my 6 basic metal powders and found that I could create 40 new shades. With 46 hues to choose from, I could not only simulate mountains receding in the distance, but better yet, by working in relief, create an infinite number of distant scenes, vistas and panoramas that had previously been the sole domain of the landscape painter. And so, landscape sculpture, a new art form, was born.



A whole new world of nature, objects, people and places, environments and tableau suddenly became available as subject matter for sculptors to adorn walls. This is what I have done in a small way and it has been both financially rewarding and totally absorbing for the last 20 years. I have only scratched the surface however. More accomplished artists than I will discover ways to simulate the subtle shading of colors in clouds, flowers and seas. Improving on the ancient Egyptian use of combined intaglio and bas-relief, tomorrow's sculptors will be able to create greater degrees of drama and realism than I ever could. All that is needed is vision and persistence.

If you visualize your scene with a foreground, middle-ground and background, you then have the opportunity to experiment with a variety of metals to simulate the different colors of objects receding toward the horizon. Design your scenes so that they also consist of several large elements of differing textures. You have room to do this on a wall relief four feet across by three feet high. But don't clutter it with unnecessary detail or components. Keep your scene simple, bold and to the point and it will be much easier for you to cast and much easier for the viewer to read as well.

### **Don't Be Seduced By Notoriety**

Anyone can invent one-of-a-kind, outrageous and shocking sculpture if they only want to get immediate attention. Blasphemous, ridiculous and even silly "art" will always get attention from the media because it is "in", and therefore qualifies as sensational and worthy "news" needed as filler for newspapers and television. What is "in" today however, will, by definition, be "out" tomorrow ... because that is the nature of fads. And the "artist" who made a profound social commentary by stringing "T-shirts on a Clothes Line" is forgotten tomorrow because he has nothing else to say. Where can he go? Does he top his first effort with bigger t-shirts or more t-shirts? No, he has to think up more outrageous bits of nonsense, none of which have any connection with each other.

Those of you who live in or near New York, Chicago, Los Angeles or other major cities could easily become discouraged about a career in sculpture if, like me, you see only what passes for art filling the high-end galleries in big cities. My advice is this: Don't waste your time, money and energy in the pursuit of what will, at best, be fleeting notoriety. Your chances of winning the Lottery are better. Of the scores of art movements and artists that have gained notoriety in the last fifty years, only a handful survived the century while the representational works of thousands of artists in the West have been, and still are, selling up a storm. Set your artistic standards higher now before certain avant garde galleries succeed in destroying even the remnants of taste in their quest for the vapid and absurd.

Anyone can come up with one or two ideas in a trendy style that is "in" today and "out" tomorrow - discardable or disposable styles. It is somewhat more difficult to produce dozens or hundreds of works that carry one's personal stamp in the manner of Henry Moore and Pablo Picasso.

I never met the great painter, Picasso, but it was my good fortune to visit with Henry Moore on several occasions. In the 1950's, to support my "sculpture habit", I worked as an actor on the London stage, in television and movies. I saw some of Moore's works at an outdoor exhibit and was deeply moved in spite of much disdain and derision from the press.

Meeting the man who had created these deeply moving images became an obsession and so, without an invitation or introduction, I drove to the village of Much Hadham, 25 miles north of London, bent on meeting the great artist. He showed me through the drawing, carving and enlarging studios...answering my questions and explaining in detail the evolution of his ideas from plaster maquette to heroic-sized bronze or stone. Looking back, I have often marveled at the time he gave me on each visit, a mere actor and neophyte sculptor. Perhaps he was impressed with my knowledge of the names and locations of his sculptures, whether on a moor in Scotland, a public square in Amsterdam or a gallery in Manchester. Several times over the years I have tried to adapt our Arizona red rocks, cactus, deserts, bleached bones and canyons to Moore's human metaphors. Though unsuccessful thus far...the challenge still exists.

The achievements of these giants should be studied in depth by every artist, collector and gallery owner because their success points out quite clearly the direction we must take if we wish to produce or acquire important works of art. Both artists expressed themselves essentially through the abstracted human figure or organic shapes identified with it.

The best of Moore's work represents the ultimate in generic art, art that has won Moore wide acclaim, because without knowing exactly why, people all over the world can see that his sculpture has a quality that is relevant to themselves. It possesses an immensely suggestive power on both conscious and unconscious levels. His use of rocks, shells, animals and such, as metaphors for parts of the human figure implies a connection between ourselves and all else in nature.

From my reading and studying Moore's work and knowing him slightly, I have formed a rule of thumb for judging an artist's importance, based not on the strength or weakness of an isolated piece, but the cumulative effect of at least half a dozen of his or her works.

#### **How do they stand up to the following questions:**

1. Does the artist have something intelligent to say?
2. Does the work have the purpose and is it successful in arousing deep emotions?
3. Is there a sense of wonder in the work?
4. Does it have power?
5. Does the work address the imagination or merely the eye?
6. Does the work contain several layers of meaning?
7. Is the artist struggling with universal, timeless and enduring themes?
8. And finally, does the work have the stuff of immortality?

While you are creating the wall-sculpture that will, at the very least finance your independence, ask yourself these questions frequently. They will most certainly make you a better sculptor and possibly a great one.

## Develop a Personal Style

By contrast you will notice, from poring over art books and visiting art museums and galleries, that all the artists whose names have become legend not only have developed a unique and recognizable style, but there will often be a theme running through many of their works. The sculptures by Moore, Rodin, Calder and Remington as well as paintings of George Bellows, Van Gogh, Dali, Cassatt, etc., are easily identified by both their style and theme,

So, take the long view. Lay a firm foundation for your future by planning. Choose a subject or subjects with the length and breadth that will afford you the time needed to develop a style, you can call your own with subject, the connecting link.

## Two Steps to Selling Relief Sculpture

1. Select subjects that pertain to your part of the country. For example, here in the Southwest, residents and tourists want familiar scenes such as Indian faces, canyons, deserts, and pueblos. In your part of the country visitors may come for views of the ocean, rocky shorelines, lighthouses and marine life. We associate Spanish-moss, flowers and mangrove-swamps with the deep South. In short, find out what the public wants and give it to them. Art galleries are an obvious source of information regarding the needs and demands of the public. Take your own photos or use post-cards of local scenes and points-of-interest for ideas that have proven buyer demand.

2. The illusion of distance and depth in relief sculpture is a very important selling feature. Collectors expect to see distant objects appear on canvas, but never in sculpture. When they do they readily recognize and appreciate the improvement made by the extra dimension...depth.

## Being Specific

Texas

I would be inclined to recreate the wonders and beauty of my state or my country, specific places that people can identify with --- rather than anonymous objects devoid of human connection. Texas, for example, is a goldmine of subjects for the sculptor who can carve or model in relief. The historic Alamo, the memorable rock formations in Palo Duro Park, canyons in the Rio Grande Valley, rugged cowboy faces, sand and seas off Padre Island and the Dallas skyline are only a few of the scores of scenes in Texas that would make great wall sculpture. And visitors to Texas, as well as native Texans, would snap them up from any art gallery.

Keep in mind that any scene that can be painted will have much more visual impact as wall-sculpture because it is not pure illusion. The third dimension, depth, greatly magnifies one's sense of reality. The river in the foreground and the rock formations in the middle distance are actually nearer than the horizon. The viewer is pulled into the scene and becomes a part of it because it does, in fact, exist.

## Florida

In Florida, NASA launch sites, seascapes, marine life, Spanish ruins and Key-West islands come easily to mind as some of the memorable images travelers from all over the world would cherish.

## Canada

Washington and British Columbia share beautiful rocky coasts, snow-capped mountains, wildlife, Puget Sound Islands and giant totems. Going further east, you can visualize scenes at the famous resorts of Banff and Lake Louise in the Canadian Rockies. Crossing the provinces I see many splendid wall decorations in Alberta and such picturesque towns as Ste. Rose du Nord on the banks of the Saguenay in Quebec, fishing villages in Newfoundland and the picturesque coves and bays of Nova Scotia.

## Mexico

In Mexico, a land where vivid colors, drama and history are inextricably entwined, a sculptor could make a substantial income by supplying European and North American tourists with over-life-size, Matrix Metal wall-sculptures of the handsome faces of Aztec men and women (as I have done with the Navajo, Hopi, Cheyenne and Comanche), glimpses of the Mayan ruins at Palenque and Chichen Itza, the Spanish courtyards and the carved, sun-bleached doorways on the cobblestone lanes of San Miguel d'Allende. The posh resorts at Mazatlan, Puerto Vallarta, Ixtapa, Acapulco, Cancun and Cabo San Lucas are crowded with travelers from all over the world searching for momentos and gifts. There is a great deal of personal satisfaction, as well as money, to be made by Mexican sculptors who will provide tourists (Mexico's main source of income), with art that rings an "emotional bell" like the examples I have listed.

## Your City and State

Every state in the USA, and indeed every country in the world has a wealth of memorable images both in people and places. With tourism a multi-billion dollar industry, the demand for reminders of things present and past cannot be ignored by the artist who hopes to find a market for his or her talents. The seeds of your success are closer at hand than you realize. You only have to walk to your nearest supermarket or gift shop and look at the post-cards to determine what attractions in your community are most popular. Many states have their own magazine, subsidized by the tourist bureau or highway department that carries photos of its most interesting natural wonders. These are the attractions in your city or state that visitors want to remember. If you can recreate these scenes in colorful, *light-weight but durable* Matrix Metals for their home and office walls back in New York or Los Angeles, they will buy on the spot and take the piece back with them on the plane.

## Southwest Scenes

I live in a town that is famous for its stunning Red Rock formations. The scenery attracts tourists from all over the world and there are dozens of art galleries where scenes of Arizona and characters of the "Old West" are displayed in oil, bronze and Matrix Metal. This is what the public wants and this is why they spend hundreds of thousands of dollars on art in Sedona annually. And yet there are sculptors and painters here who complain that local galleries won't show their work.

They refuse, however to "cater" to the tourists because that would be, God forbid, "commercial". Commercial, of course, but what isn't? The only device I can think of to avoid being commercial is to give your work away. Competition in this business is horrendous, with thousands of talented artists unable to connect with a successful gallery. So, you have to have a "gimmick", even if you are gifted. I am not gifted, but believing that tourists are also people is even better in some ways. And I do have a "gimmick"... Matrix Metal which provides me with monthly checks from a dozen galleries that sell my work. I am fortunate, too, in that I really enjoy recreating nostalgic scenes of the Southwest that apparently, judging from the almost 3000 purchases tourists have made of my work, have filled an emotional need and given much pleasure.

I think Donald Trump, the consummate and competitive businessman, summed it up nicely a few years ago in one of his books. It was a time when the Hollywood elite and many movie goers were poking fun at Sylvester Stallone for his "Rocky" series. Trump, in contrast, thought that Stallone was one of the smartest guys he'd ever known because, "he figured out what the public wanted and gave it to them". All you sculptors out there who can't sell your work ... are you listening?

### America's Top 25 Arts Destinations for 2000

(Courtesy American Style Magazine)

These 25 cities in 16 States and the District of Columbia are located within 75% of the population of the 48 contiguous States. The future has never looked brighter for the sculptor who can capture interesting scenes near his or her city in bas-relief and sell reproductions in colorful Matrix Metals and hand-painted Matrix Marble.

1. Cape Cod, MA
2. New York, NY
3. Santa Fe, NM
4. San Francisco, CA
5. New Hope, PA
6. Asheville, NC
7. Washington, D.C.
8. Saugatuck, MI
9. New Orleans, LA
10. Seattle, WA
11. Chicago, IL
12. Williamsburg, VA
13. Northampton, MA
14. Bainbridge Island, WA.
15. Scottsdale, AZ
16. Houston, TX
17. Los Angeles, CA
18. Chapel Hill, NC
19. Portland, OR
20. Nashville, TN
21. Taos, NM
22. Sedona, AZ
23. Boston, MA
24. Dallas, TX
25. Philadelphia, PA

**Here is an additional list of arts destinations of my own:**

1. Las Vegas, NV
2. Eureka Springs, AR
3. Tubac, AZ
4. Park City, UT
5. Carmel, CA
6. Aspen, CO
7. Vail, CO
8. Sun Valley, ID
9. Helena, MT
10. Woodstock, NY
11. Stratford, ON (Canada)
12. Cannon Beach, OR
13. Hilton Head, SC
14. Berkeley Springs, W.VA
15. Jackson, WY

## Chapter 5

### **The Evolution of Matrix Metals and Matrix Marble**

Because all questions about casting with Matrix Metal that come to me via e-mail are related to the colors, the cost, the weight and versatility of metal powders, a little history and background information on their use would be appropriate at this point. Having some knowledge of powder metallurgy will certainly give you an appreciation and understanding necessary for you to feel at ease in using Matrix Metals to your greatest advantage.

#### **History and Present Use**

Finely ground metals were used long before ancient artisans learned to melt and cast iron. Egyptians made iron tools using powder metal techniques from at least 3000 BC. Inca Indians made jewelry and artifacts from precious metal powders, but the first modern powdered metal product was the tungsten filament for electric light bulbs developed in the early 1900s.

The most common metals available in powder form are iron and steel, tin, nickel, copper and aluminum. Alloys such as bronze (copper and tin), brass (copper and zinc), stainless steel (steel and chromium) and nickel cobalt are also available. Major methods for making metal powders are atomization (cold water spray) of molten metals and electrolysis.

The basic industrial powder metal process uses pressure and heat to form precision metal parts and shapes. The powder is squeezed in a rigid die at enormous pressure then heated by a furnace that bonds or fuses the particles together in a phenomenon called "sintering".

Annual worldwide metal powder production today exceeds a million tons with most applications in the United States going into automobiles, aircraft engines and appliances. We also consume about 2 million pounds of iron powder yearly in enriched cereals and bread.

#### **Metal Powders in Sculpture**

Now that you have some of the industry facts, let me add some metal powder facts of my own as they apply to the arts. First, avoid steel and nickel powders. They are extremely hard, making polishing an almost impossible task. Instead of Sterling Silver, which is expensive, I substituted tin for a couple of years, but since it must be imported from Bolivia, it also became very expensive. So I now blend aluminum powder GIO (mined mostly in Quebec, and which is faintly blue) with Brass-178 (which is pale green), both from U.S. Bronze Powders, Inc. The two metals, when mixed in a ratio of 2 parts *by weight* of GIO with 3 parts *by weight* of 178, cancel each other out (color wise). The result is a beautiful, easily polished silvery metal which, incidentally, weathers very well.

Years ago I also experimented with lead powder blends which produced some interesting results, but lead powder has now been outlawed because of its toxicity. Powdered gold is available, but the cost ruled out my use of it until a client, for whom I was designing abstract ornaments for his three garage doors, said he wanted to be able to tell people they were gold. I solved the dilemma by buying three ounces of 18 kt gold powder and added equal amounts to the brass powder casts. The client was delighted with the results.

## Early Use of Metal Fillers

The marriage of metal powders with *Polylite ProCast* polyester resin to create *Matrix Metal* did not occur quickly or easily, but was the result of years of trial and error, starting in the early 1960s while I was searching for a less expensive alternative to the traditional "lost wax" process used in casting sculpture.

I will not bore you with the details of the hundreds of experiments I made with acrylics, polyesters, epoxies, polyurethanes, polysulfides, "metallic" powders and flakes, iron and brass shavings, latex molds, RTV's, silicones, styrene, promoters, accelerators, cobalt, PVC, thinners, thickeners, release agents, etc., except to say that, one by one, I eliminated all the resins except a "general purpose" polyester (*later changed to PolyLite ProCast*) and all the molding compounds except silicone.

The word got around that I knew a lot about the latest molding and casting materials, resulting in a call from the Smithsonian Institution asking if I could solve a problem they were having. It seems the American School of Classical Studies in Athens was trying to supply several museums in Europe, as well as the Smithsonian, with copies of the Acropolis and other buildings in the Agora, the ancient public gathering place. The Greek model maker, using plaster, was able to recreate highly detailed replicas but which, unfortunately, suffered great damage in shipment.

I had silicones and epoxies shipped to Athens, then spent three weeks there teaching their technicians how to make gang molds and casts that were tough enough to withstand the rigors of travel.

But the break-through in inventing an up-dated casting technique came during the third year of my experiments. While poring over lists of *suppliers of metal products*, I discovered the magic word "powder". Follow-up calls produced the astounding news that indeed, during all the months that I had been trying to produce my own powders by pulverizing brass and iron shavings, there existed a whole industry based on Powder Metallurgy. Mills all over the world were turning out train loads of the stuff used in the manufacture of a thousand every-day items. My letters to metal powder companies in New York, New Jersey, Tennessee, Ohio, etc., brought free samples of a half dozen powders, the foremost being bronze, that I thought might be used for casting sculpture. Through trial and error, I learned that bronze powders, indeed all alloys, can vary in composition (which affects color) and mesh size (which affects polish). The best results, those most resembling foundry (or lost wax) bronze, are obtained with a bronze that is made up of 90% copper and 10% tin and a nominal mesh size of, at least minus (-)100. This means that 100 grains of this powder laid side by side will equal 1 inch. Powders up to -300 mesh are okay as long as the color is acceptable. Finer powders will just give you a less grainy surface and a higher polish. Both requirements of color and mesh size are met in bronze B-401 from US Bronze Powders, Inc. which also, as mentioned later, is my supplier of a yellow brass, a green brass, copper and aluminum. I buy iron powder from Pyron, Inc. in Niagara Falls, NY.

Initially, you may want to experiment with the 1/2 pound samples sent on request from US Bronze Powders, Inc. As your needs increase you can buy them in small quantities, but the first good price break comes with buying powders by the pail...about 120 pounds. I have heard that US Bronze Powders, Inc. may be planning to produce a starter kit consisting of small quantities of 5 basic metal powders for sculptors.



## Test Samples

In order to work out the weight ratios of powders to resin and catalyst on a small scale, I first made a cluster of six silicone molds measuring 2 1/2" x 3 1/2" from 1/4" thick acrylic blocks. (I strongly suggest that you do the same to test results on a small scale before you cast a piece of sculpture). The trial metal mixes that I poured in these little molds taught me that the resin/metal mix should pour like "coffee cream". There is a table at the end of this chapter that gives recommended amounts (by weight) of all 6 metals to mix with resin (by weight) for best flow characteristics.

The temperature of the resin can vary greatly according to the time of year. Cold resin (below room temperature, or 74 degrees) is thicker. Warm resin (above room temperature), is thinner than normal and therefore, the recommended amounts of metal may not apply exactly. So, keep in mind, that my suggested amounts of metal is only a guideline and that the ***ideal*** metal/resin mix should be thick enough to produce a concentration of metal that will give a high polish while being thin enough to flow easily into all your finest texture without leaving bubbles in the cast. That ratio will be about right if, in all seasons and temperatures, it flows like "coffee cream".

## Using Pure and Blended Metal Powders

If you look at the surface of a sample cast with a microscope of 10x power or more *before polishing*, the granules of powder will be clearly visible. The more closely they are concentrated (meaning less resin between particles), the brighter will be the polish, because the scrubbing or rotary action of the fine steel wool actually heats and softens the metal to the extent that the tiny particles will flow together, overlap and cover the matrix of resin binding the particles, thereby forming a continuous and unbroken metal surface. With your hand held microscope, also look at the *edge* of your sample cast and you will see that the metal particles are compacted on the face of the cast, but gradually thin out leaving pure resin floating on top. That is the result we want...showing that ***the metal has fallen out of suspension in the liquid and formed a layer of 99% pure metal on the surface.***

When you are using the Reichold *Polylite ProCast 32144* polyester, that I now use exclusively and follow my recommendations to sift Cab-0-Sil (a thickener from your resin supplier) over the first resin/metal mix and brush lightly in, this division may not be visible. If you have problems with polishing your casts this cross-section view may explain why.

## Blending Metal Powders

Certainly the first thing that attracts buyers to Matrix Metal sculpture is the variety of colors that bring the piece to life and make it unique. This is the only process in which several metals can be cast in the same mold without creating blurred edges. In fact, ***six distinct metals*** of totally different color can be mixed to produce ***an infinite number of blends***. This is revolutionary in itself. The sculptor, for the first time can challenge the painter with his color palette greatly increasing the range and richness of his subjects. Anything close to this versatility would be impossible in an art foundry because even *two* molten metals (bronze and iron for example), poured together into an open mold, would merge and unite creating an ugly gray/brown slurry.

In contrast, as a sculptor, all the elements in a scene that you create on a relief panel - whether they consist of an eagle soaring over snow capped mountains, crashing waves on a rocky coast, or an ocean liner and the Statue of Liberty silhouetted against towering cumulus clouds - will produce clearly defined shapes in your open mold.

Now you can begin to be creative like a painter...with color. From your repertoire of metal samples, both pure and blended, choose tints that work together. Mix them one at a time with the catalyzed resin and simply brush the mix into its allotted part of the mold.

I began by casting my first sculptures in powdered bronze, aluminum and brass - in fact, all the "pure" metals, and they looked authentic, but "flat". So I started experimenting with mixing metals in equal parts using a kitchen measuring spoon to combine 5 parts of copper with 5 parts of brass to make orange, then the same ratio of copper and iron for lavender, copper and nickel-silver for a pink metal. I began to incorporate these in my landscapes, but I soon needed more color gradations and so I devised a simple blending system based on 10 equal parts by volume (using measuring spoons), divided into four combinations: 8-2, 6-4, 4-6, 2-8, made small sample casts of each, drilled small holes near the top and hung them on nails on a display panel for easy reference. When I need to work out the best color combinations to use in a new piece, I place these sample casts in designated areas of the mold to see if the colors work together.

### **Matrix Marble**

Casting relief sculpture in Matrix Marble opens up a completely new set of possibilities and advantages not possible with powdered metal. Here are some:

1. Powdered marble is less expensive.
2. The resin/marble mix can be tinted any color before pouring.
3. The cast can be painted or air-brushed.
4. Flaws in the cast are easier to repair.
5. No polishing or patining is necessary.
6. Casting in one color is fast.

Ten pounds of white marble powder can be purchased from any manufacturer of synthetic counter and vanity tops for only a few dollars. Being much lighter than metal, it will not fall and compact like metal powder, so you must add some white sand (a 50lb. bag costs \$10. at any builders supply store) to the mix to give it the needed weight. Also, add a bit of white pigment (available from your resin distributor) to kill the resin color. My Matrix Marble casts have been hand-painted, spray-painted, antiqued, glazed and air-brushed which has resulted in some wonderful effects. A sculptor/painter who is adept at using the air-brush could create a totally unique series of delicately colored and shaded flower blossoms 3 - 4 feet in diameter cast in light-weight Matrix Marble.

Brilliant sunsets, dramatic cloud effects and the greater detail of an infinite number of scenes can be painted much more easily on a white Matrix Marble wall-sculpture than can be cast in powdered metal.

## Pigments and Dyes

The supplier of the white pigment you added to your Matrix Marble cast will also have a variety of bright pigments especially formulated for compatibility with polyesters. You don't need much pigment to make a big color difference, so buy and use them in small quantities. When I want a blue sky in one of my landscapes, I use a touch of light blue pigment with aluminum powder; for green mountains, cactus and water I add light green pigment to B-178 brass; to intensify the color of copper, brass and iron I have added red, yellow and black pigments respectively. Keep a variety of these pigments on hand for experimenting with both your metal and marble casts.

Another means for adding color is to patine your finished metal casts with aniline dyes. Light fast, alcohol soluble dyes can be obtained from Keystone Aniline Corp. which you will find in my List of Suppliers. All the primary colors are available and they can be mixed in small quantities with alcohol and blended to produce every color shade imaginable.

When I have applied green, yellow and blue dyes to my nickel-silver Macaw and then lightly buffed it with fine steel wool, allowing the metal to shine through, the effect is elegant. Try it on a nickel-silver or brass seascape, sunset or mountain range. There are no color rules in contemporary art and the public loves to buy the new and different.

### Weight of Metal to Resin For Good Flow Characteristics

<u>Metal</u>	<u>Resin</u>
Aluminum ( GIO)	1.5 X
Brass (B-406)	3 X
Bronze ( B-401)	4 X
Copper (C-112)	4 X
Iron (AC- 325)	3 X
Nickel-Silver (GIO & B-178)	2 X
Brass (B-178)	3 X

Example: Resin...100grams.....Bronze powder...400grams

These ratios are based on the use of Polylite Procast -32141 polyester resin and the metal powders of the same mesh size and from the same manufacturer as those referred to in this book.

**Incidentally, a "general purpose" polyester from your local supplier may work fine for you. If your casts show signs of "crazing" however, then you should switch to Polylite.**

Slight adjustments may be necessary if they are used in room temperatures higher or lower than 74 degrees F.

## Chapter 6

### **How to Create a Landscape or Scene**

Having read about selling your sculpture, working in bas-relief, themes that sell, developing your style and the origins of powdered metal you are probably impatient to get started.

#### Clay

If you don't already have a supply of wax-based clay or plasteline, I recommend one of the many modeling clays available from Chavant, Inc. and Klean Klay. Contact them via phone or e-mail at the address from my "List of Suppliers" in Chapter 12 and ask for a Sample Kit. From this kit order 40 or 60 lbs of the soft, tan modeling clay.

#### Tools

Your local art supply store will have modeling tools of various sizes and shapes. Buy a half dozen of the boxwood tools 6-8 inches long -- nothing fancy at first -- then add to your collection as your needs become clear. Sculpture House in New York is an excellent source of tools at quantity discounts. They will send you a catalog on request.

#### Subjects

At the end of Chapter 4 there is a list of about 50 art subjects from Abstracts to the Zodiac for you to choose from. Go down that list slowly and make a note of the subjects that turn you on emotionally, awaken long forgotten dreams and are closest to your heart and your personal experience. Those are the themes you will want to explore, to live with for the coming months or years and the themes that will demand your greatest passion and intensity. You will undoubtedly add to this list as you grow artistically.

If art galleries in your city and your state are exhibiting paintings and prints on these themes, so much the better because there is no point in wasting your time on subjects for which there is no demand. Later, when your name is well known, the public will buy anything you produce. But, for now, you must consider what gallery owners can sell, which, if it is an established business, will be closely tied to what the public wants.

#### **Making "Taos Pueblo Two"**

Views of interesting and unique tourist sites are popular subjects for art buyers no matter the geographical location so I will use one of my own, very successful pieces, *Taos Pueblo Two*, to show you how to start. As I said earlier, I don't like spending precious time on building armatures nor do I enjoy the mind-numbing chore of applying unnecessary clay. So, whenever I can, I first build basic relief forms with layers of 1/8" wood paneling or sheet foam cut and shaped to bulk out the sculpture close to its final depth. This way I save much time and weight.

The scene, pictured on my Web site ([www.sculptureunltd.com](http://www.sculptureunltd.com)), is a composite of snapshots and post-card pictures of the pueblos in Taos, New Mexico. It was first sketched out on a big piece of brown wrapping paper ripped from a roll that hangs in my studio for just that purpose. The various elements (ladders, pueblos, bread ovens, mountains and sky), provide the foreground, middle-ground and background necessary for the illusion of depth and they all fit nicely into a horizontal format 20" high by 36" wide, a size and shape, incidentally, that is desirable in many homes.

## **Plywood "Canvas"**

So, I first cut a 20" x 36" rectangle from a 5/8" thick sheet of plywood which will act as the "canvas" on which I will model my relief sculpture. You must start with this 5/8" or 3/4" thick plywood base because you will need that thickness when the metal, filler and fiberglass are in place. Now, on that base, I staple 1/8" thick plywood templates, taken from the paper drawing, of each element... mountains, rear pueblos, nearest pueblos and ovens.

The combined thickness of the 5/8" rectangle plus the tiers is now over 1 and 1/2" thick. I now have the basic relief shapes, layout and design of my desired wall-sculpture. Since I will be making a mold of this relief, now is the time to allow for the extra surround space that the mold will require. Therefore, I nail this rectangle onto another backing plywood sheet, 3" larger all around, (26"x 42").

## **Using Clay to Create the "Picture"**

When I place this panel on my easel, I will apply clay to accentuate angles and depth, to add realistic texture to the mountains, adobe walls and ovens and to simulate the planks of wooden doors. Ladders and log ends will be cut, shaped and roughed-up from wooden dowels bought at my local hardware store.

## **Edition Size**

Don't forget to sign your name in the lower right hand corner and carve the edition size in the clay as well (\_\_\_\_\_/150 for example). When each cast comes out of the mold, use a pointed Dremel tool to engrave the number of that particular cast in the space provided. The size of the edition is up to you. Some sculptors, if they are well known, will choose a number under 15 in the belief that rare pieces have more value. This may be true if the sculpture is priced in the tens of thousands of dollars and the collector is buying for investment purposes only, but when your work is retailing in the hundreds of dollars, certainly under \$3,000, buyers are not thinking of reselling for profit. Edition size is, therefore, not a factor. They are buying, ideally (from the sculptors standpoint), only because the piece has struck an emotional cord. But, of course, there are other reasons too...subject matter, size, shape and color all play a part in determining sales.

Putting an edition number on your work is not irrevocable in any case. One of the first pieces I did when I moved to Arizona 20 years ago was a portrait of a Navajo girl I adapted from a book of photographs by Edward Curtis. A blanket framed her sensitive and somewhat tragic face, a face that seemed out of place in this modern world. I wanted to capture the disillusionment I saw there, especially in her eyes. After much difficulty, I finished the piece and decided on an edition of 30, thinking her face was too sad to attract many buyers. I was wrong. Women related immediately to the forbearance and endurance reflected in her eyes and bought the edition out in a few months. I then added a few years to her face and made a new mold with an edition size of 150. Ten years later that edition, too, sold out so I enlarged the blanket surrounding her face, making it easier to cast, and increased the edition size to 200. To date, galleries have sold over 75 of this new version, making Navajo Girl my most successful piece...with sales over 250 and still going. She retails for \$600 which translates to \$158,000 or \$76,500 in revenue for both galleries and myself...so far.

There are several lessons to be learned from this story:

1. Don't give up on the original idea that once appealed to you. The public may see something more in it that you did.
2. Don't deprive the public of a piece that has proven demand when an edition is sold out. Make changes and start a new edition.

Now, let's get back to the making of **Taos Pueblo Two**. In a matter of a few enjoyable hours I have converted pictures of adobe pueblos into clay, which when cast in blends of Matrix copper, brass and iron will be a colorful, light-weight, three-dimensional wall sculpture. Since I am writing this book to convince you that money can be made from Matrix Metal sculpture...then you should know that galleries in four Western states have sold 130 copies of this Southwestern scene to date at an average price of \$700. That translates into over \$91,000 gross...split about 50/50 between the galleries and me...so far.

No matter where you live, interesting subjects for wall sculpture abound...even in your local library magazine section. For example: On the cover of a National Geographic Magazine was a dramatic picture of the crashing waves on the California coast. I used it as the inspiration for my **Big Sur Breakers** and was able to capture the illusion of the sun shining through salt spray by stippling Matrix Brass over bronze rocks.

My big, rugged cowboy, **Top Hand**, also originated with the National Geographic Magazine. This time, what caught my eye was the heavily creased face of a Lithuanian carrying a basket of fruit and looking suspiciously over his left shoulder. I enlarged the face, added the Stetson, mustache, side-burns and neckerchief and cast it in Matrix Bronze with nickel-silver accents. It is over 4' high and 3' across and weighs only 20 lbs. To the two dozen collectors who have to date bought this heroic sized, craggy faced cowboy, he represents the ruthlessness of the old West...never suspecting the truth. How I wish that Lithuanian could see himself as a cowboy!

Ideas for wall sculpture have come from picture books, post-cards, my own snapshots and countless magazines.

## Chapter 7

**Note:** Although I have been using the materials recommended in this book for 40 years with no adverse reaction, they may be hazardous to your health. Wear plastic gloves and, if needed, a protective face mask and test the various materials for any reactions you may have before using. Philip Vickers and Sculpture Unlimited assume no liability for their use.

### **Making an Open Silicone Mold**

Let us assume now that you have completed your first bas-relief and are ready to make a mold. Whether your first piece is a landscape, portrait, nautical scene, animal, sports figure or still life, straight-sided or free-form, it should have been constructed, and/or modeled on a plywood rectangle with about a 3" clearance all around the image. A rectangle, resting on your easel, will allow you to sit while you work, adding many hours to your working day and helping you to reach your goals more quickly.

#### **Mold Preparation**

First, place your bas-relief with back-up panel on a work bench and level it. The first layer of liquid silicone will then settle evenly over the surface. Silicone will not stick to your art work, whether clay, wood, etc., but it will run under anything that is not sealed causing big problems later when you are ready to remove the mold. So reduce all your undercuts and seal all cracks and holes with clay. If the 3" area around your art work is rough and uneven, brush a thin layer of Vaseline or paste wax on that area. There is no need to spray or brush a release agent of any kind onto your art work. The silicone is itself the release agent.

#### **Liquid Coat to Pick-Up Detail**

You have by now bought a starter kit of HS2 silicone, green clay catalyst and "thickener" from Dow Corning, on the List of Suppliers in Chapter 12, and a gram scale from Hanson (also listed). You can't estimate precisely the amount of silicone you need to cover your relief, so start with 200 grams of silicone in a large paper cup. Get the cups from your local supplier of popcorn cups and buckets used at the movies or at a warehouse store such as Costco. In a separate small cup pour the required 10% catalyst, i.e., for 200 grams of silicone use 20 grams of the green catalyst. Add the catalyst to your silicone and stir thoroughly with a small metal spatula, scraping the cup sides and bottom, until the contents are an even shade of pale green. Make sure there are no traces of white, uncatalyzed silicone.

Pour some of this mixture over your relief and with a soft, 1" brush lightly stroke the silicone (being careful not to disturb the clay) until it covers your art work and a one inch flange on all sides. Let this layer cure over night. Soak the brush in a jar of Toluene, available at any hardware store.

Keep a record of the amounts of silicone and catalyst you used and with a marker, make a mark on the plywood panel after each layer. Incidentally, double up on the paper cups containing the silicone mix so there is less chance of puncturing one while stirring. When you've emptied one of the cups, put the clean one inside it immediately.

### **Thickened Coats**

For the second layer, weigh out the same amount used in the first coat, but this time add a dab of the "thickener" from Dow Corning as well as the catalyst. Dow Corning also makes a **clear** catalyst which you can alternate with the **green** catalyst to identify layers easily. Stir thoroughly and brush an even coat over your mold. This time there will be no run-off so you can more easily control the silicone thickness. Repeat this process 4-5 times until you have a mold 1/4" to 3/8" thick. Lift a couple of corners of the mold with a plaster knife, peel it back to check the thickness. To extend the life of your mold, you may want to add a layer of cheese cloth. If so, press the cloth gently onto the third layer with a dry sponge while it is very "tacky". When cured, cover with the next coat of silicone.

### **The Fiberglass Jacket**

Now make a snug fiberglass jacket to give the flexible mold its final and permanent shape. Measure the length and breadth of your piece, including the 1 inch flange and all the mountains and valleys. Cut two pieces the correct size from your roll of fiberglass matt or cloth. Lay one of the pieces over your mold and, by snipping it here and there with your shears, make sure it will drape easily and fit snugly when you apply the resin. Leave that layer of matt in place.

### **Weighing the Resin**

For this stage and others later, you could use a "general purpose" polyester resin rather than the highly specialized ProCast. It is usually less expensive but you will want to check shipping costs.

In a paper cup weigh 200 grams of resin (to starter with) and with a medicinal syringe measure 2cc of MEK catalyst. This ratio (200 gr. resin to 2cc catalyst) represents 1%. It is very simple, just remember: add 1cc of MEK for every 100 grams of resin. If you prefer using an eye dropper then the rule is: 20 drops = 1cc. Take your choice.

### **How Much Catalyst ?**

If it is a very hot day and your studio/shop is not air conditioned, use a little less than 1% MEK. If the air in your working area is much below 74 degrees (room temperature), then exceed 1% by a drop or two. You can thusly regulate the curing time of the resin by varying the amount of MEK, but **never** use less than 1/2 %, or 10 drops per 100 grams of resin. Stir thoroughly with a wooden or metal spatula in a paper cup.



Next, to hasten wetting the previously fitted fiberglass piece and obtain a stronger jacket, expose half of your mold by carefully folding half of the fiberglass over itself. Pour some resin from your cup and brush it evenly over the exposed half of your mold. Fold the fiberglass back in place and do the same on the other half of the mold. Now, with a disposable 2" brush, stipple vigorously until the resin impregnates and saturates the fiberglass. Keep stippling until you work out most of the air pockets caught under the fiberglass. The less trapped air, the tighter the bond. Repeat this process with the second layer of glass while the first is still wet. If there are gaps in the glass layers as a result of tailoring, add strips of glass matt or cloth where needed. To clean your brush, soak it in acetone.

### **Removing the Jacket**

Let this jacket cure overnight. To remove it, just slip a spatula blade or screw driver between the jacket and silicone mold and twist. If all the projections and edges of your relief have slanted sides, the jacket will slip off with no trouble. If it is difficult to pop off, **carefully drill small holes in the glass only**, and with your air compressor nozzle blow air under the fiberglass until the jacket and mold separate. Lay the jacket to one side, then carefully peel off the silicone mold and lay it into the jacket. Trim the edges of the silicone mold with shears and the fiberglass jacket with a scroll saw until the edges of the two match. Any Plasteline clinging to the inside of the mold can be removed with a wooden tool and alcohol. You are now ready to make your first cast.

But first level the mold...permanently. Because the various parts of your clay relief will project differently, the open mold will not lie flat. Therefore, fit wooden blocks and shims under the corners of your jacket until all four sides are **bubble centered** on your level, and then fix those blocks in place with a paste made of resin and Cab-0-Sil.

When your sculpture is hanging in a gallery or in someone's home you will want it to lie **flat** against the wall, but this can happen **only** if it has been cast in a **level** mold.

Making this mold and jacket may have required four or five hours of your time and may seem like a lot of work, but rejoice! It is good for probably 100 casts worth thousands and thousands of dollars.

## Chapter 8

**Note: Although I have been using the materials recommended in this book for 40 years with no adverse reaction, they may be hazardous to your health. Wear plastic gloves and, if needed, a protective face mask and test the various materials for any reactions you may have before using. Philip Vickers and Sculpture Unlimited assume no liability for their use.**

### **Casting your Wall Sculpture in Matrix Metal and Matrix Marble**

Now that you have completed your first relief sculpture in clay and made an open-faced, silicone mold, the next exciting step is to see how it will look in Matrix Metal.

So that you learn how to cast your work in simple, easy stages your first relief should be cast in *one* metal only. Since bronze is usually associated with cast sculpture let's use that metal this time. Polished bronze is indeed rich and flattering, as you will soon see.

#### **Determining Area**

The first thing we need to determine is the area of the surface to be covered with metal. Let us suppose your sculpture is a view of an old Spanish Mission in California. It might be one of those with a long row of picturesque arches, palm trees, a wrought iron or crumbling rock wall in the foreground, a rough wooden cross hanging on a wall, Spanish tile roof, a bell tower and the snow-capped peaks of the Sierra Nevadas in the background. Let us assume that the trees, mission and mountains, in different depths of relief, are in tiers on a panel measuring 18" high by 30" wide. The dimensions on the inside of the mold, which include the 1" (on average) deep sides are 20" high x 32" wide, making the area to be covered by the Matrix Bronze 640 sq. inches.

Each square foot of mold area requires about 60 grams of resin. So, 640 (total square inches to be covered) divided by 144 (square inches in a square foot) = (roughly) 4.5 sq.ft. Multiply that by 60 (grams of resin per sq. ft.) and you will find that about 270 grams of resin will be needed.

#### **Materials needed in casting your first wall relief**

To begin the casting process, make sure you have these items ready:

- Scale (calibrated in grams)
- paper cups from 3 to 20 oz.
- Polylite ProCast polyester resin (32141-00)
- Methyl Ethyl Ketone Peroxide or MEK (catalyst for the resin)
- eye-dropper or cc syringe
- B-401 bronze powder (U.S.Bronze Powders, Inc.)
- Cab-O-Sil
- Set of measuring spoons used in cooking
- roll of paper towels
- acetone (gallon)
- 1/2", 1", 2" disposable, bristle brushes
- sculptors plaster spatulas or tools for mixing and stirring

## Weighing the Resin

Place the 12 oz. paper cup on your scale and set the scale at "0". Pour in 270 grams of the PolyLite ProCast (32141) resin and put it aside for a moment.

The ideal consistency that we want for the resin-metal mix should be like "coffee cream" because it will then be thin enough to flow into the finest detail and texture of the mold without trapping air (causing bubbles in your cast) and, at the same time, it must have enough metal content so that it will polish easily.

## Weighing the Metal

Each of the five metals you will eventually be using, because of their difference in weight and mesh size, will be added to the resin in different amounts to achieve the "coffee cream" consistency. In the case of bronze, you add at least four times the resin weight.

As we have already decided, this mold will need 270 grams of resin. Since we are to add bronze at 4 times the amount of resin...we get  $270 \times 4$ , or 1080 grams of bronze

So, in a paper cup, weigh out 1080 grams of bronze powder and put that cup along side the cup of resin.

## How Much Catalyst

The next step is to catalyze the resin so that it will cure. The rule of thumb for catalyzing resin at room temperature (74 degrees F) is to use a 1% ratio of MEK to resin. In other words, for every 100 grams of resin use 1 cc of MEK from a syringe or 20 drops from an eyedropper. So, to your 270 grams of resin add 2.5cc or 55 drops of MEK. If your studio is warmer than 74 degrees, use a few drops less MEK...say 2cc (40 drops). If your studio is only 65 degrees, add extra drops (3cc or 60 drops).

Somewhere near your mixing table I strongly suggest that you thumb tack a large, stiff card at eye level that states in bold, red letters, "DON'T FORGET TO ADD MEK". Adding the catalyst will soon become a habit, but until then you don't want to rely on your memory to do this. A reminder, in the form of a colorful sign, will save you a lot of disappointment and time cleaning up a mess caused by an uncatalyzed resin-metal mix.

## Mixing Resin and Metal

Now, stir the MEK into the resin (you will see the resin turn darker) for a couple of minutes. Then add the bronze powder slowly while you are stirring (no thick accumulation in the bottom of the cup) until "coffee cream" consistency has been reached. You must understand that the amounts of resin and metal prescribed above may not apply to your situation due to variations in temperature and the mesh size of the metals you may be using. With practice you will gain confidence and skill.

Now you can start pouring the contents into a deep area of the mold. You can tilt the mold or brush the liquid out in all directions. When you have covered one area, pour the mix into another area and brush it out until the complete surface is covered. Don't brush the mix too thin, but don't let it pool up either. Cover the complete mold, including the sides, with an even layer of the bronze mix. The inside of the mold should have a "wet" look, shiny and liquid. If there are dry patches use your brush to distribute the mix more evenly. If there are still dry areas...mix up another few grams of metal/resin and brush that in to get an even coat.

If you have to add extra amounts of material, don't forget to change the amounts in your written "Formula". Once you have poured most of the mixture, go back with a 1/2" brush and add a thin strip of bronze mix to the horizontal flange of the mold. This is not always necessary, but it will prevent the vertical sides of the cast from shrinking away from the silicone mold. When the inside of your mold is covered, using a flour sifter, **sift in a little Cab-0-Sil** evenly over the metal and brush them together. A light touch will not disturb the bronze layer on the mold face. All you want to achieve here is to prevent the resin from pooling up in low areas and the Cab-O-Sil will act as a gentle thickener.

A previous chapter on the use of metal powders talked about the materials we use and why they must be combined in the way described in order to get the desired, lustrous result. Now that you have actually weighed, measured and poured your first cast you will have a clearer understanding of the reasons for doing each step in such a way.

### **Create a "Formulas" Book**

Now is the time to enter your first "Formula" in a loose-leaf note book. I use one that is about 5" x 3" with lined pages. At the top of the first page write the name of the piece which might be "Calif. Mission", then the size of the edition which could be \_\_\_/150.

Now list the steps starting with:

1. 270 grams resin  
2.5 cc mek (30 drops)  
1080 grams bronze

In ProCast we have a polyester resin that shrinks minimally, does not craze in the curing process and is thin (or fluid) enough to allow the fine metal particles to fall out of suspension and compact on to the surface of the mold. In the 1/2 hour or so between the time you finished brushing the metal-mix into the mold and the resin gelling, the powdered metal was slowly settling to the bottom of the solution. The bronze, being heavier, displaced the resin and formed a continuous and unbroken metal surface. This is what we want because the denser the metal particles on the face of the cast, the easier it will be to polish the sculpture to a bright luster.

## The "Fill" Coat

In a few hours the "Metal Coat" will have gelled (depending on temperature and catalyst). But wait until it has cured **hard** before you start the next stage because you do not want to disturb the metal coat. If you have kept a record of resin and metal amounts you used, all succeeding casts will become less time consuming. In a very short time these numbers will become second nature and you will be pocketing hundreds of dollars instead of giving it to a foundry.

The inside surface of your mold, even though now covered with a layer of metal-resin mix, will show a very uneven and irregular surface due to the deep modeling and texture in the original clay. You now want to round-off all the angles, creating a smoother, rounded surface for the fiberglass, since fiberglass matt or cloth, even when wet with resin, will not conform to this irregular surface easily. This "rounding" I call the "Fill Coat".

In a paper cup, pour the same amount of resin (270 grams) used in the metal coat, catalyze it, then, while stirring, add a small cup of bronze powder (as a back-up metal) plus enough Cab-0-Sil to produce a soft paste. Brush and poke this into all the nooks, crannies and corners making sure no air is trapped. If you have created a very deep and undulating relief two "fill" coats may be required before the surface is sufficiently rounded for resin-impregnated fiberglass to fit snugly and relatively free of air pockets. But don't apply the second coat of "fill" until the first one is cured. Thick sections of resin and resin-Cab-0-Sil mix (particularly if they contain metal) become very hot during the curing process. The exotherm, or loss of heat, could warp or distort your cast, so don't go above 1% catalyst and avoid resin build up thicker than 1/2".

## The Edge

The next step we will take to ensure a strong, durable cast is the strengthening of the vertical sides of the cast. The metal coat that you brushed in initially covered the sides, but much of it ran off, leaving only a thin metal skin which can be easily damaged. We will now beef it up with a 3/16"-1/4" thick wall made of resin/Cab-0-Sil metal paste.

Again, start with a couple of hundred grams of resin, add some bronze for color and as a back-up metal (in case you polish through the surface coat). Add Cab-0-Sil and power mix into a fairly stiff paste. Use a paint mixer in a power drill to make a smooth paste slippery enough not to cause your spatula to "drag". But handle the power mixer with caution. It could easily dig into the sides of your mixing cup. With a small brush smooth the paste on the "edge".

With a metal plaster spatula apply this paste along the vertical sides of your mold, from the top edge of the mold down to join your "fill" coat.

## Clamps

Any long, straight sides of your relief are subject to bowing during the curing process. To prevent this, use spring clamps (from a stationers store) to hold the flanges of the silicone mold and the fiberglass jacket together. Let this stage cure for a few hours or overnight and you will be ready to apply a layer of fiberglass...tying the three stages into a strong and rigid unit.

## The Fiberglass Back-up

Measure the inside dimensions of your cast including the vertical sides and the undulations. Cut a rectangle of fiberglass matt or cloth that will fit inside with about an inch extra all around. Lay the fiberglass in the mold. At the corners, make a 45degree slit and overlap. Mix up enough resin to cover the fiberglass, fold it half way back (as you did when making the jacket), brush a generous amount onto the cast, repeat on other half and stipple resin through the glass *eliminating all pockets of air*. When this stage is "gelled" (firm, but not hard), trim off the excess glass with a matt knife and allow it to cure hard overnight.

## Chapter 9

### **Finishing the Cast**

To remove the cast, invert the mold onto your bench, lift off the glass jacket and peel the silicone mold carefully off your relief. You should have a perfect bronze reproduction of your sculpture. But it won't look like bronze yet. With a small Dremel tool, grind off any imperfections and inscribe a number in the space allotted. With a coarse file or belt sander, remove any fiberglass hairs remaining from your earlier trimming along the edges.

For the next day or so, while you are performing various finishing chores, keep the piece laying over a plywood sheet thick enough to prevent sagging in the center. Your work will not be fully cured for a week, so it can warp and distort slightly if it is not kept on a flat, supportive surface while you are patining, polishing and fixing the wire for hanging.

### **Adding a Patina**

I think bronze sculpture looks better when aged. A dark patina in the cracks and crevasses helps to throw the piece into deeper relief when the high points have been polished. I like to see a pronounced contrast between high and low areas, so I have devised a simple patina consisting of Flat Black spray paint *diluted by half with Turpatine* (a substitute for turpentine). True turpentine leaves a gummy residue, Turpatine does not. You can buy it at Wal-Mart and Ace Hardware stores. Brush it over your cast and when it is dry you are ready to polish.

Don't hesitate to experiment with patine colors. For example, on one piece that I always cast in blends of copper and nickel-silver, a pale blue patine looks great. If you want your bronze cast to look like an antique, use a shade of green spray paint in Turpatine. To make nickel-silver look bright and new try Flat White. But these are just "back-up" colors that add contrast and variety to your sculpture. Chapter Five explains how to make your sculpture even more attractive by extending the color range with pigments and dyes .

### **Polishing**

Buffing with 00 or 000 steel wool pads, the outer film of resin is removed quickly and easily exposing the shining metal below. For now, you will probably be content with the pads, but later you may want to take advantage of lower costs offered through the supplier that I have listed. When buying in quantity you will receive 6 rolls, 4" wide x 18" in diameter. A lot of polishing time is saved by cutting off a 12" length from the roll and spinning it on to a slotted spindle inserted into an adjustable speed drill. When using this method, never let the spindle rest on one area of the work. Keep it moving or you will polish right on through the metal into the duller "fill" coat.

### **Hanging Device**

How you hang your sculpture will depend on its weight and the depth of the relief. For a low-relief, rectangular landscape weighing up to 10 lbs for instance, I use a picture framer's metal loops. I space the two loops near the outer edges of the cast, with the loops facing outwards, cover the flanges first with resin paste then small squares of wetted fiberglass, being careful not to interfere with the loop hinges. Picture wire will do the rest.

To hang pieces that are extremely undulating (heads of wildlife or portraits of Indians and Cowboys for instance) and weighing 15-20 lbs., I cut two strips of 3" wide fiberglass tape about 10" long, lay them out flat on newspaper, brush on resin, make two twists in the middle of each tape and lay them into the back of the cast widely spaced. Then apply more resin paste. When the strips are cured hard, string heavy-duty picture wire between the narrow twists.

### **Disguising the Fiberglass**

Rather than have raw fiberglass exposed in the back of the cast, I have used several methods for covering it. (1) Stipple a mixture of resin, Cab-0-Sil, pigment and sand over the glass. This will add weight as well as give the appearance of a sand casting. (2) Spray Flat Black enamel over the interior. (3) With resin-paste, secure wooden blocks into inside each corner of a rectangular piece and screw a fitted sheet of 1/8" plywood onto the blocks. Be sure to include blocks for picture hangers.

### **Urethane Foam**

Sometimes the extreme highs and lows in the back of a relief make it impossible for fiberglass to fit closely, resulting in a potentially weak cast. To avoid this problem, I have recently started using foam to fill a difficult cavity, resulting in a very strong cast at a great saving in time. Experiment with small quantities before you try anything major and always plan to clamp a cover over the foamed area to prevent expansion in the wrong direction.

### **Information Label**

Many years ago when I started casting my work in Matrix Metal, I learned that some of my collectors had attempted to remove the tarnish from Matrix Copper (for instance) with a strong solvent. (Copper, incidentally, along with any metal containing copper; e.g. brass and bronze, will tarnish). Certain solvents will indeed, attack the resin and damage the metal quality, so I had some small labels printed which read as follows:



## MATRIX METALS

This sculpture is cast in Matrix Metal which has been the exclusive trademark of Philip Vickers for 35 years. The process employs real bronze, nickel-silver, brass, copper and iron cast in a new way resulting in lightweight but very durable casts ideally suited for wall relief. Matrix Metals tarnish just like foundry metals and require ***only*** fine steel wool to restore their original sheen.

This 3 x 3 1/2" label, spray glued to a 1/4" thick block is attached to the back of every sculpture that leaves my studio. I suggest that you use a similar warning.

### Multi-Metal Casting

In casting several metals in the same piece, just follow instructions given above, but with this warning: ***Weigh all the metals and resins*** necessary for the job ***first***. Line them up in paper cups in the proper sequence beginning with the metal that will be poured first, i.e., the ***lowest*** area of the mold and working up, area by area, to the ***highest*** section of the mold. This will assure that the metal colors will not flow into each other.

Only now can you begin to catalyze the resins and mix in the appropriate metal, one at a time as you need them. And don't forget, your mold is a ***negative*** and therefore a ***reverse*** of your original sculpture. ***Left*** is now ***right*** and vice versa.

### Framing

I have sometimes used birch core, walnut, silver, gold and white frames on my landscapes for special orders. Picture matt can be used in conjunction with frames to add color and variety, but ***never*** use white matt board unless you want to kill your sculpture just as it kills a good painting.

### Trimming the Rough Edges

A cast fresh out of the mold will have rough fiberglass edges until they are ground off with a belt sander. If you have such a sander mounted on a stand so much the better, because you only have to press the flat edges of the cast against the belt to grind them smooth. A hand held sander will do the job just as well. Be careful, either way, not to let the belt cut into the cast. Keep the sander moving, back and forth, and tilted slightly to eliminate all signs of loose fiberglass threads.

# PART

2

## Chapter 10

### How to Screen Print and Stencil your Designs in Matrix Metal

Having once watched the process of silk-screen printing and saw how easily and inexpensively one can make copies, I decided to try it with Matrix Metal instead of paint or ink. The result was a beautiful line drawing in Matrix Copper "inlaid" in Matrix Brass. It made a stunning table top. I screened 10 copies, laminated them to 10 tables and sold them all with no trouble at a very nice profit.

This opened up many possibilities for embellishing home and office furniture such as bar fronts, pedestals, head-boards, tables, desks, room-dividers, planters, walls and doors, that I was very tempted to start a completely new company just to handle the demand that I knew printing with metal would generate. However, it just wasn't feasible at the time for me to start another big project, so I had to let the idea die. But you can bring it back to life and here is how you can do it quite easily with only two inexpensive pieces of equipment not mentioned in previous chapters:

1. A smooth surface on which to screen your designs.
2. A fine mesh metal screen.

Let us suppose that you have a favorite picture, perhaps of a bird in flight, a drawing of a female nude, a floral study or sports figures that you wish to use as a decoration on a table top, planter, a pedestal...or all three. Decide which piece of furniture will have the largest surface on the side you wish to decorate, say 12" x 20". Using a piece of 1/4" plate glass or sheet acrylic 16" x 24" (the size of the framed screen you will use), build a clay wall 1/2" high around it and make a silicone mold. Pour the silicone to the top of the wall in one operation. When it has cured be sure to cover it with a strong fiber-glass jacket for rigidity. On curing, remove jacket, flip the mold over, remove the acrylic template and you have 1/4" thick, polished silicone surface on which to screen print any number of designs. And it will release your resin-based images very easily.

The bigger the mold the better, because it will hold screens of many sizes according to your needs. You may want to screen a design in one corner or one end of the mold or even offset the design. There are many options for decoration when you have a large printing surface.

From one of the suppliers of metal screens (Chapter 12), get a sheet of stainless steel or copper screen. I recommend fine mesh metal screen because it will far outlast a silk-screen when you are cleaning it with acetone or lacquer thinner. .

You may want to attach the metal screens to frames yourself eventually, but go to a professional screen maker the first time to see how it's done. Next, you must have your chosen image *transferred* to the screen and I suggest you go to a professional for this step as well...the first time. Later you can do your own stencil cutting and gluing.

Remember that your printed drawing or picture will be *reversed* when it is removed from the mold. Also, if you aren't familiar with screen printing techniques, you can get books on the subject at your local library. The best book I know on the subject is, "Silk Screen Techniques", which is also listed at the end of Chapter 12. Follow those directions and you will have no trouble.

### **For Fiberglass Laminate**

Position your framed screen into the silicone mold and pour, along one side, a flowable mix of catalyzed metal-resin. Then just press gently and pull this mix across the stencil with your squeegee. When you lift the squeegee the screen will return to its normal position slightly above the mold face.

Next remove the screen and complete the "inlay" effect by pouring in a second, contrasting metal to fill the remaining space. Mix up only enough to cover your design and flow out to what ever size you want. These two metals *should cure together*, thereby eliminating any possibility of curled edges on the "inlay". Once they have gelled (firm, but not rigid), pour another, thinner resin-metal mix over the entire "cast" to give it strength and body.

Some attractive inlay effects can be achieved with combinations of copper/brass, nickel-silver/copper, nickel-silver/bronze, bronze/brass, nickel-silver/brass, iron/copper, iron/bronze and, for a very subtle contrast, aluminum/nickel-silver.

The last step in completing your screened metal design will be to add a layer of resin impregnated fiberglass for reinforcement. When that step has cured you can simply lift your laminated design out of the mold. If the edges are irregular they can be trimmed or cut to size with a metal cutting saw blade, preferably carbide-tipped. You can use this metal "inlay" in many ways, one of the simplest being framed to hang on the wall. Or it could be laminated to a desk, cabinet or bar front and again surrounded with a suitable wooden frame. Your imagination and creativity will discover many applications.

### **Attaching Matrix Metal "Inlay" Directly to Solid Wood**

All of the principals, equipment, methods and tools of screen printing with paint apply in exactly the same way to printing with Matrix Metals on wire mesh. Clean up, as I have mentioned, is different because of the medium. Instead of paint thinner, you will brush acetone or lacquer thinner to wash away the resin on the screen. And, depending on the consistency of metal mix used in the screening, you may not have to wash it between impressions, although you *do not* want the resin to cure on the screen.

If you want to inlay a design on the top and uprights of a Parsons table, for example, then you merely adhere a walnut or mahogany slab to the cast in place of fiberglass. Precut the wood to fit inside the mold, pour in enough resin to cover the cast and press in the walnut plank, being sure to tighten clamps evenly on all sides, thereby permanently bonding the metal to the wood. When you have completed the screening of your design for the top and both ends, then only glue, dowels and perhaps a "rabbit" will be needed to provide the necessary rigidity. This same procedure can be used to cast four sides of a planter, cube table or pedestals.

### **Stenciling Graphic Designs**

Styles in graphic designs change so frequently that you might want to use an inexpensive stencil material, such as cardboard, to create multi-metal inlays. Simple geometric shapes such as circles, squares, stripes, cones or triangles arranged in an infinite number of patterns can be easily transferred to, and cut out of, heavy paper. While holding the stencil firmly in place, the perforated areas of the stencil can then be brushed over with a dense mix (so not to run) of vary colored metals. When the stencil is removed, a "neutral" metal is poured into the mold binding all metals together. How you "back-up" the cast will depend solely on the use you want to make of it and there are many options.

Ideas for graphic designs can be found in magazines on fabrics, wall-paper, advertising, ceramics, tile, modern art, nature, etc. and you will find that combining graphic ideas will generate even more.

If you want to make multiple copies of a bold graphic design or marbled swirls that have no fine detail requiring a screen, for use perhaps on many pieces of furniture, you can make a stencil out of a 1/4" smooth silicone slab. Unlike a cardboard stencil it will lie flat in the mold even after much use.

## Chapter 11

### **How to Create Textured Panels For Walls**

Once interior designers see what you can do with multi-colored metal panels on furniture, they will begin to visualize projects on a larger scale. That's what happened to me.

Knowing that interior designers are always looking for unique decorative ideas, I had taken small samples of my silk-screened, stenciled and textured designs to several of them for their suggestions and opinions. They were all intrigued and within a week one of them asked for an appointment to visit my studio. It turned out they were in the midst of a contract to design interiors for several banks using textured bronze panels. After describing a low-relief texture they found attractive, asked if I could make something similar.

After seeing my clay maquette, they ordered twelve 8' x 4' panels in Matrix Bronze which were then cut into various sizes and inset into oak fixtures for use on the walls, in front of the teller cages and on check-writing kiosks. The bank interior was a great success and I was contracted to do other banks and to design and cast 16 three-metal logos for each bank.

The explanation that follows applies to the creation of any number of raised surfaces and textures that can be cast in a variety of metal colors and bonded to 3/4" plywood panels. The panels can then be mounted side by side with wooden cleats to cover entire walls or cut to any desired size and used in a variety of commercial applications.

Here again is the nucleus of a profitable business that will engage and demand the talents of many creative people besides sculptors and graphic designers. As I mentioned in Chapter One, a combination of creativeness in art and sales promotion in the uses of Matrix Metals can result in years of pleasure and profit.

#### **Creating a Sculptured Clay Surface**

To make large metal panels, you first need a sturdy 9' x 5' plywood table or bench. Centered on this bench place a 3/4" x 8' x 4' sheet of plywood, nail it down and then tack a *1" high lath strip against the four sides of the ply.* This 32 sq. ft. area with its 1/4" recessed cavity is then filled with plasteline. This may sound like a tedious job to you as it did to me until I bought a used electric meat slicer, set it at 1/4" and, instead of cold cuts, pushed tandem bricks of plasteline past the blade and had hundreds of 1/4" slabs in record time.

When the cavity is filled with clay, pull a wooden or metal screed across the surface repeatedly until the plasteline squares have melded into a smooth, flat surface. Consider this a clean canvas on which you can now design an infinite number of bas-relief textures and surfaces.

#### **Texturing With Clay**

The bank assignment required that the metal surface be a made up of totally irregular shapes spreading evenly over the panel like smoke moving this way and that in a closed space. To capture the mental image, I covered the "canvas" with odd sized and shaped pieces of clay and again, using the screed, pushed, pulled and flattened the bits of clay until they formed a swirling chimera. This "Smoke" texture was so successful that it was later used to cover the entire wall of a conference room, form table tops and construct pedestals.

Some of my later designs were called "Flames", "Lilypads", "Bamboo", "Basketweave", "Tannery", "Strata", "Bastille" and "Crusades", each resembling its descriptive name.

Develop your interesting textural ideas on 6", 9" and 12" clay plaques. Cast them in the five basic metals, metal blends and even two-tone combinations for a full display of the color possibilities. These can then be easily carried to appointments with architects and interior designers in a smart leather sample case. Contractors on large building projects have rows of illustrated material catalogues from which they usually place orders, but due to ease of communication, prefer to work with local suppliers. So, as soon as you can afford a full size, color brochure with price list by all means have it printed and delivered. And always follow up with a phone call to see if the right person got it.

I had so many requests from clients to leave samples of colors and textures that eventually I solved the problem by casting 12" squares of the most preferred textures in a variety of metals and blends, backing them up with 1/4" Masonite and then cutting them into 2" x 3" rectangles. Ordering information was adhered to the back and the 10 samples were strung together with a decorative chain. As a sales tool it was very effective.

### **Molding A Large Panel**

When you have finished the sculptured clay surface, you will be ready for the silicone mold which is made as follows:

Remove the 1" lath wall from around the textured panel and put it aside...as you will need it again. Construct another wall 1 and 1/2" high around the panel, but 1/2" outside the perimeter. Hold the wall firmly with wedges nailed along the outside edge and then seal it with clay along the inside dimension. Make sure the bench and the panel are absolutely level. Try to estimate the amount of silicone needed to cover the top and sides of your panel to a thickness of 3/8" to 1/2". This will vary depending on the surface design, so have at least 2 gallons of silicone available and ready to use.

Weigh and catalyze no more than about 2 lbs. of the silicone at a time. Mix thoroughly and pour over the panel until the top of the wall is reached. In mixing the silicone and catalyst with the electric paint mixer you will have drawn a lot of air into the mix and bubbles will now begin to rise to the surface, dropping the level of the resin. If the level drops much under the 1/2" thickness, add more silicone and let it cure overnight.

### **Casting a Large Panel**

When the mold is firm, remove the strip retaining wall and gently peel the mold off the panel. Trim any bits of flashing residue. Lift the textured clay panel off the 9' x 5' bench and out of the way and replace it with the silicone mold.

At this point, brush a layer of Vaseline or car wax over the remaining, exposed area of the plywood bench. At a later stage you will be glad the wood is sealed.

For casting a panel this size you need 1/2 gallon paper buckets which are available from your hardware store or buy them by the carton to save money.

In a double bucket, mix only one or two lbs. of resin at a time at the beginning. If you are casting bronze, you will need 4 times that amount to achieve a coffee-cream consistency, but 8 lbs. is about all the weight you can handle safely at one time.

Cover the surface to a depth of about 1/16". Brush the metal-mix out evenly in all directions and make sure that the thin PolyLite resin is not "pooling" in the deeply textured areas which could cause a visible layer of clear resin in the cast. To prevent this happening sift a little Cab-0-Sil into those areas and brush it into the resin. *Never add Cab-0-Sil into the first resin-metal mix* because you want only *pure metal* on the surface of the cast. Once the metal is firmly in place however, you can brush Cab-0-sil on as a thickener to prevent pooling. —

### **Bonding the Plywood Panel**

To obtain a tight bond between metal and plywood back-up panel have the following on hand:

1. One 3/4" x 8' x 4' unwarped plywood panel.
2. Five 5' lengths of 2" x 4".
3. Ten clamps long enough to span 2 x 4's and bench sides.

Now place a couple of sheets of newspaper under the edge and around the perimeter of the mold to catch and absorb over-flow from the bonding process. The wax you applied earlier will also prevent sticking.

Mix and pour over the first metal coat (which, of course, is still in the mold), enough resin to cover it to a depth of 1/8". Lower the plywood panel into the mold, lay the 2 x 4's *on edge* spaced evenly across the width of the panel, set the clamps in place and tighten them evenly, *working from the center towards both ends*. The purpose of the clamps is to eliminate trapped air only. The resin is necessary for bonding metal to wood. Don't try to squeeze it all out.

To prevent warpage of the ply panel, brush catalyzed resin also on the exposed side of plywood until saturated. Cleaning up the over-flow is easiest when the resin has gelled, but not yet cured. Allow several days for bonding process to cure before removing clamps.

### **Removing Textured Metal Panel**

Carefully turn the panel over and peel the mold off the cast. After filing off rough edges and applying a dark "Turpatine" based patina, it will be ready for polishing.

### **How to Create a Random, Free-Form Design in Two Metals**

Once you have a textured, 4' x 8' mold, many possibilities for a variety of metal colors open up. You can cast the panel in one pure metal, a blend of several metals or create a two-metal design free-form. Here's how:

Once you have determined how much resin/metal mix is required to cover the entire panel, use 1/2 that amount for one metal (say nickel-silver) and the other 1/2 for a contrasting metal, such as brass.

Fill two paper cups (ones that will fit easily into each hand), with the two metal/resin mixes, catalyze and pour the contents simultaneously, in a circular, swirling fashion from both hands into the mold. Using an easily flowable, quite liquid mix, start at one end of the mold and work towards the other pouring the same amount evenly from both cups and allowing the metals to run together until the entire surface is covered. When metals have cured, you are ready to back up the panel with 3/4" plywood or fiberglass, depending on the end use.



## Chapter 12

### List of Suppliers

#### CLAY

Chavant, Inc.  
42 West ST.  
Red Bank, NJ 07701  
1-800-242-8268  
fax 732-842-3621  
e-mail: mail@chavant.com

Art Chemical Products, Inc.  
P.O. Box 678  
Huntington, IN 46750  
(Kleen Klay)

#### SILICONE

K.R. Anderson, Co.  
2800 Bowers Ave.  
Santa Clara, CA 95051  
1-800-538-8712  
fax 408-727-2959  
AZ Distributor:  
4316 E. University Dr.  
602-437-0030

Dow Corning Corp.  
Midland, MI 48686-0994  
1-517-496-6000

#### METAL POWDERS

U.S. Bronze Powders, Inc.  
P.O. Box 301, Rte 202  
Flemington, NJ 08822  
1-800-544-0186

Pyron, Corp  
P.O. Box 310  
Niagara Falls, NY 14304  
1-716-285-3451  
Iron AC - 325

Aluminum G-10  
Brass (yellow) B-128  
Brass (green) B-178  
Bronze B-40  
Copper C-112  
For Silver Metal:  
Blend Aluminum G-10 with  
Brass B-178 in a ratio of  
40% to 60% by weight

**For information about  
powdered metals  
worldwide, contact:**  
Metal Powder Industries  
Federation  
105 College Road East  
Princeton, NJ 08540  
Tel: 609-452-7700  
E-mail: dale@mpif.org

## CASTING RESIN

Reichold, Inc.  
P.O. Box 13582  
Research Triangle, NC 27709  
Customer Service  
Mark Adams  
1-800-448-3482  
Ext. 8001

AZ Distributor:  
Composite Materials, Inc.  
27014 W. Virginia Ave.  
Phoenix, AZ 85009  
1-800-522-2599

### SCALE

Hanson Scales  
Shubecta, MS  
Dietetic Scale  
Model 1460  
Capacity of 1000 gr.  
by 2 grams, 20, 100, etc.

### DYES

Keystone Aniline Corp.  
Pacific Division  
13767 Milroroy Pl.  
Santa Fe Springs, CA 90670

### STEEL WOOL

International Steel Wool  
Springfield, OH  
AZ Distributor:  
L & D Enterprises  
22001 N. Black Canyon  
Phoenix, AZ 85080-2607

### PLASTIC APRONS & GLOVES

Handgards  
P.O. Box 27018  
El Paso, TX  
1-800-351-8161

### SCULPTURE SUPPLIES

Sculpture House  
100 Camp Meeting Ave.  
Skillman, NY 08558  
1-609-466-2986

### CHOPPED FIBERS

AZ Distibutor:  
Desert Sun  
21412 N. 14 ST.  
Phoenix, AZ

### SCREEN PRINTING SUPPLIES

Saati Americas  
Majestech Division  
Route 100, P.O. Box 440  
Somers, N.Y. 10589  
1-800-431-2200  
www.majestech.com

### BOOKS

Silk Screen Techniques  
Biegeleisen and Cohn  
Dover Publications, Inc.  
New York, NY  
  
U.S. Screen Printing Institute  
605 S. Rockford Dr.  
Tempe, AZ  
toll free - US / Canada  
1-800-624-6532

# PART

3

## Chapter 13

### "No One Should Drive a Hard Bargain with an Artist"

Ludwig von Beethoven

### Pricing Your Work

Before you approach your first gallery, have a pretty good idea of the price you are putting on each piece based on the time it took you to produce *that particular copy*. The value of your time (\$30.00/hour @ 3 hours...?), the cost of materials (\$50.00), your over-head (consisting of operating expenses during those hours) and a 50% profit margin may total \$300, which would be your basic *wholesale price*. It is unlikely that the gallery owner will buy your work at this stage, preferring to wait until it has a sales history. But he may take it on consignment, retailing it for \$600. But let him set the final retail price as long as you get at least 50%. Some galleries will take only 40%, giving you 60%, but that is rare.

### The Brochure

The brochure should consist of color pictures of your work printed on coated paper, a sheet of ordinary stock paper printed with a dated *Retail Price List* with names and dimensions of each of your works, a page with a small *picture of yourself* with a *brief "bio"* and a short list of your degrees, prizes, commissions, etc. Also include a page with a *description of Matrix Metal*. Gallery visitors, although familiar with the look of bronze, brass and silver, will be baffled by their first view of pink, green, blue and mauve metals, and will have to know what this material is. Here is what is printed in my brochure in answer to that question:

### *Matrix Metals*

**Matrix Metals** is a Trademark for the casting technique developed by Philip Vickers and used exclusively in his sculpture for thirty years. The basic process employs a metal, such as bronze, combined with another material and poured into a mold. The result is a metal cast indistinguishable from foundry bronze in appearance, but far less expensive and much lighter in weight - ideally suited for wall reliefs. *Sculpture Unlimited* has extended the color range with the use of copper, brass, nickel-silver and iron, then created completely new metal shades such as pink, orange, green and lavender through the blending of several metals and the use of pigments and dyes. **Matrix Metals** patine and tarnish just as foundry metals do, and require only a touch up with fine steel wool to restore their original polish.

You have my permission to use any part of the above in your brochure, although you will probably want to give that information your own spin. Please notice I never use the words "plastic" or "resin" for the simple reason that some people, who have not yet caught up with 21st Century materials and techniques, equate plastics with shower curtains and waste baskets. When someone uses the word "plastic" to describe your work remind them nicely of Frank Gallo's great figures in *epoxy* and the beautiful works cast in acrylics by the late master sculptor Frederick Hart. Point as well to the many talented and successful painters who use only acrylic colors.

### **Profit**

And now, to answer the last question about making a profit: When you have fashioned bas-reliefs that have cost only \$30-\$50. each in materials to cast and when each one is priced in the \$300-\$500. wholesale range in **editions of 200**, it takes only simple arithmetic, e.g. \$400. (average price) x 200 to see that you can gross \$80,000. on each edition. When you subtract \$8,000., the cost of producing the complete edition: \$40. (average cost of materials) x 200, your net profit then becomes **\$72,000.**, when the edition is sold out. If you have 10 pieces in this price range, your profit will be **\$720,000.** Ten pieces, however, should be only the beginning. I've produced well over fifty, five of which have sold out with a couple of dozen more pieces approaching that point and many well over the 100 mark.

But I didn't even begin to work with galleries until I was over 60 years old. The sculptor in his or her 20s or 30s, who learns to work with these materials in the way I have described, can make a very comfortable income for the next 40 to 50 years with lots of extra time and money to travel, give to worthy causes and accumulate for retirement at age 90.

## Chapter 14

### **Art Galleries and Brochures**

When you have finished 3-4 wall sculptures in Matrix Metal, all related by subject, you should begin to explore the possibilities of finding an interested gallery.

#### **Making an Appointment**

Naturally, your first preference would be to exhibit and sell your work in galleries close to home because you can resupply them easily. Two of my best selling galleries (one Southwest, one Wildlife) are only five minutes from my studio so I keep extra casts of 16 of my best selling pieces always ready for delivery shortly after they call me to report a sale. When a gallery has allotted a particular space on its wall for my work, I don't want that space to remain empty any longer than necessary. By filling that space quickly, another sale of the piece has often been made the same day.

People buy art priced in the \$100s on impulse. They see a piece in the window or on the wall of an art gallery with the "right" colors and, as the joke goes, "realize it fits that empty space over the sofa" and will buy it on the spot. Foot traffic is therefore important when searching for galleries and shopping malls will often provide that traffic.

Tie up only with established galleries that are selling "regional art" in your price range and have been in business in one location for at least a year. I know of numerous cases where galleries failed because they introduced art from a different region. For example; a gallery on Long Island, New York showing only art and artifacts from the Southwest, a gallery in Arizona exhibiting only paintings of the Colorado Rockies, a gallery on the Northern California coast specializing in Florida marine life all failed because the owners didn't research the market and ignored the fact that we often buy art as a reminder of far-off, exotic places we have visited or, local residents buying the local product. Abstract, Modern, European and Old Masters sell in big cities everywhere, but the people who buy them are spending large sums for investment and eventual resale. That is not our market. Our market is much larger.

I was talking with the owner of a fabulous new Southwestern art gallery here in Sedona just a few days ago who confirmed my opinion that successful galleries outside the big cities exhibit only regional art. "Contemporary regional" perhaps, but certainly regional. He told me his full page ads in art magazines drew collectors from both Asia and Europe; collectors who would never buy Southwestern art in their own country.

When you have located a gallery that is exhibiting art in your price range and compatible subject matter, get the owner's name and send him a sales letter extolling the virtues and unique qualities of both your wall sculpture and Matrix Metals. The competition is horrendous and getting worse, so you must sell your product in this letter. Emphasize the positives of:

- 1). reasonable pricing
- 2). depth adds to reality
- 3). many colors
- 4). no pedestal needed
- 5). light-weight,
- 6). large edition

Include 5 x 7 inch color photos of your work mounted on black paper in a clear acetate sleeve (available at any office supply store), a typed, short history or "bio" about yourself and a covering letter stating that you will call back at a specified time (a week later), to make an appointment. Follow up as promised and persist until you get appointments and always arrive on time. Gallery owners are business men and women. They prefer to deal only with artists that are punctual and businesslike.

A word here about your "bio": As I said above, make it short. Artists make a big mistake when they clutter up their bios with names and dates that have no meaning to anyone but themselves. Neither gallery owners nor the public are interested in the place and date of your birth nor the names of your instructors in art school. Your brochure is supposed to serve as a selling tool, not an ego trip. List your artistic accomplishments, if you have any. If not, dwell on the reasons for choosing the subjects of your work. Assume that the person reading your bio, whether gallery owner or potential buyer, is interested in your life experiences as they relate to the subject matter in your sculpture. They want to know how qualified you are to undertake that particular subject in the hopes that you and your work will be the solution to their artistic search. Always slant the description of yourself and your work in that direction.

Don't waste your time or that of the owner until you have at least 3-4 sculptures to show him so that he can recognize a personal style and continuity in your work and get a feel for the direction you are going. He needs to consider where and how much wall space (every square foot in the gallery must produce income) that he can devote to your work, assess your ability to furnish replacements without delay and produce new work. If he is going to take time from other things to hanging your work, labeling it, learning about this new process and promoting you through shows and advertising, he will need and expect some commitment from you as well.

Keep in mind that you will be showing the gallery owner an art form that he has never seen before and might therefore resist, preferring to play it safe with traditional paintings, prints, ceramics and bronzes. Remind him that the public is constantly drawn to the new, the different and unique and once he decides to sell your work explain the importance of clustering your pieces close together so that viewers will be able to see a uniformity and harmony in your work. This is especially true when this totally unfamiliar, brand-new art form is on display. If your wall sculpture is well lit it will sell faster and portraits should always be hung at eye-level.

When you have gained some confidence in the salability of your work, you may want to do what I have done on several occasions when a gallery owner hesitated in trying something new. Tell him to give four of your pieces a two week trial and if one of them does not sell in that time you will cheerfully pull everything out. That way he only risks his precious space for a week or two. That takes him off the hook of making a long term commitment and shows that you have great confidence in the salability of your work. This offer succeeded for me on several occasions as it can work for you.

## **Overcoming Gallery Inertia**

For every gallery that has exhibited and sold my Matrix Metal sculpture in the last twenty years, there have been ten more that have stated emphatically that it couldn't be done. The most frequently used reason was the word "plastic", delivered in a tone that betrayed the speakers total lack of connection with the real world...the growing world of "synthetics".

I had discovered a technique for casting sculpture that was much less expensive, faster, easier, more colorful and lighter-weight than old foundry methods and yet there were people who were blind to the advantages. This was a 20th Century "state-of-the-art" process using the latest time and money-saving materials. The life-giving Garvik Heart, bullet-proof vests, boats, automobiles and 1,000 other useful items were being made of plastic. Artists were painting with fast-drying acrylics, and sculpture was beginning to be cast and carved in clear acrylic.

Yet many gallery owners refused to recognize the wave of the future. Sculpture had to be cast in foundry bronze that cost thousands of dollars and weighed at least 50 pounds or it wasn't legitimate sculpture. It also had to be brown in color and sit on a pedestal.

I didn't agree. There were multi-hued deserts, canyons and mountains with blue skies and green cacti here in the Southwest that I thought would make great subjects for sculpture in Matrix Metal. They would be light enough to hang on a wall in any home, apartment or office and cost only a few hundred dollars which a whole world of new collectors could afford. If painters could sell thousands of inexpensive copies of their landscapes, portraits and wildlife in the form of large-edition prints, why shouldn't sculptors be given the same opportunity?

And so I determined that by creating a series of people and places of the Southwest in editions of 200, my Matrix Metal "prints" would change all that...and it has.

## **Consignment Agreement**

Be sure to get a copy of the gallery's Consignment Agreement listing the name, retail price and edition number of all the pieces that have been accepted for sale. A reputable gallery will have a printed form for this purpose. It should also include *your wholesale price* and *your percentage* and should be signed by the owner.

Initially, have some inexpensive flyers printed and leave a few with the gallery for handouts to interested viewers. However, as soon as you can afford it, perhaps when you have produced eight or ten pieces, have a color brochure printed and try to persuade your galleries to buy them in batches of 10 at \$2 to \$3 each, or half what they cost you. A computer, digital camera and a good color copier will work fine initially. For people who like your work and want to show pictures to a spouse, take measurements or "think about it", your brochure can be a very effective selling tool.



## Chapter 15

### **Selling Your Work on the Internet**

Many months ago when I wrote the Introduction to this book, I said that my Web site brought only inquiries about Matrix Metals but no sales. That is no longer true. In the meantime, I have shipped sculpture to Hong Kong, the Middle East, two dozen casts of my Bull and Bear to the Toronto Stock Exchange as well as pieces to California, New York, Georgia, Texas, Oregon, Utah and Kentucky.

This does not mean that I have changed my mind about most people buying art for reasons of nostalgia...reminders of their travels. No, all the pieces with Southwestern themes were bought **after** the buyers had been to Arizona on a visit and wanted to relive the experience. Also, many of the remaining orders were for my big Lion and Elephant relief heads, African wildlife, of course, having universal appeal.

I stand by my statement that the overwhelming majority of your sales will be sculptures of people and places in your state or region - dramatic renditions of interesting, ethnic faces and local historical and geological attractions.

Terry Bingham, who writes a column on Internet Sales in Art World News, believes that extremely high-end art by internationally famous artists is often bought via the Internet from galleries that will offer the best price. The prospective collector, already familiar with the painting or sculpture and determined to own it, then surfs the Web for a gallery that can acquire it and accept his offer.

The great majority of buyers, usually women, buy art largely on impulse. They may be browsing art galleries for a painting (because it hangs on the wall), hoping to find one with colors compatible with existing curtains, carpets, decor, dimensions and affordable as well. One of your pieces could easily meet these criteria, as well as offer the added advantage of **the third dimension - depth**. If so, it will win out over the painting.

When we buy art we all prefer to view it up close, touch it, feel it and gratify ourselves instantly by walking out the door with it. That is why the majority of your sales will come from galleries. With your works pictured on the Internet however, they will be seen on tens of thousands of computer screens around the world. If you want to take on the responsibility of guaranteeing unconditional satisfaction in spite of the high cost of insurance for uncertain handling, it can be very exciting to get orders from faraway states and even across oceans. This is a great way too for making friends in foreign countries.

## **National Association of Relief Sculptors NARS**

The phenomenal sales of my wall sculptures for the past 20 years have convinced me that with more exposure in art galleries, this almost-lost-art of bas-relief could soon experience a renaissance in private collections .

Today, bas-relief sculpture is pretty much confined to the facades of religious and public buildings. But I believe that with publicity and promotion it could have an increasingly bright future in home decor as well.

The necessary press coverage will come as soon as a dozen sculptors working in this medium form an organization for their common good. Many organizations focusing attention on water-colorists, women artists, portrait painters, cowboy artists, plein-air painters and such already exist and they are reaping great financial rewards as a result of their collective numbers.

Frankly, I'm not looking for more galleries or sales. I already owe the few that I am in a dozen copies and I can't keep up with Internet orders, but I will act as a focal point for those of you who are interested in organizing.

Because of my own positive experience, I think the expectation of success is far greater for those of you who work in clay and cast large editions in Matrix Metal and Marble, but if your preference is wood, stone, ceramics, glass or fabric and you recognize the advantages of membership in a group, I see no reason why your work wouldn't be acceptable as well.

Send me photos of your relief work and when I have the first dozen names I will notify everyone (hopefully by e-mail) and we'll begin to create a document outlining and defining the organization, its goals and conditions. I look forward to hearing from many of you.

Philip Vickers

## **About The Author**

After leaving his native Oklahoma for careers as a fighter-pilot in the Royal Canadian Air Force and then as a West End stage, movie and television actor for ten years in London, Philip Vickers discovered the fascinating world of sculpture.

His early portraits of British fighter ace, Air Vice Marshal J.E. Johnson (Vickers' former Wing Commander); Parisian fashion designer, Hubert de Givenchy and legendary theatrical producer Sir Barry Jackson, earned him an invitation to exhibit with the Royal Society of Portrait Sculptors.

Later in Washington, DC, Vickers created heroic-sized figures, reliefs and portraits for the Smithsonian Institution, US Air Force Museum in Dayton, Ohio and Canadian War Museum in Ottawa as well as creating sculpture for architects and corporations.

During his twenty years in Sedona, Arizona, Vickers' over-life-size portraits of cowboys, Indians and his innovative art form, landscape sculpture, all cast in a process of his invention - Matrix Metal, have sold in the thousands. Vickers is now re-creating in bas-relief the colorful people and places of pre-Columbian and colonial Mexico.