



Robin Hopper

Ceramics

A Lifetime
of Works,
Ideas and
Teachings



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Photography by Judi Dyelle and others



This pendant is from northern China or southern Mongolia and likely dates from the mid-19th century. It is a symbolic insignia that has three characters that mean “Hundred Family Protector.” In communities of more than a hundred families, this would be presented to an elder. My wife found it in an antiques store in Montreal and presented it to me in respect of our blended families and my role as an itinerant teacher to many potters around the world. It has significant meaning to me, and I wear it with pride.

DEDICATION

I dedicate this book to Judi, my wife and partner. She has now been my constant aide, adviser, critic and image maker for six books in a row. A heartfelt thanks.

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To the hundreds of thousands of potters of the last 10,000 years, from whom I continue to learn and gain understanding and inspiration for my own further development. May we tread forever softly in your footprints and honor your collective memory.

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I wish to express my gratitude to all of the people who have helped in the development of this book, either directly or by buying my work, books, videos and teachings. Any book is a team effort. To all, my sincere thanks.

Robin Hopper
Victoria, Canada
March 2006

“The artist is an exalted craftsperson. In rare moments of inspiration the grace of heaven may cause his work to blossom into art, but proficiency in a craft is essential to any artist.”

-Walter Gropius

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INTRODUCTION



The concept for this book was proposed to me by Julie Stephani, former acquisitions editor for Krause Publications, with whom I had a lengthy professional association resulting in five previous books.

Initially, I felt more than a little dubious about the idea, so I asked what value she thought it might have. She said that she felt that my story might be a great help to others going down the same road. I then asked what would be the most important things I could offer. Her reply was that it should include the somewhat unusual life story from early childhood onward, an overview of my 50 years of work, a discussion of my idea sources and a review of what others have said have been some of my more influential or innovative research and teachings.

So, for what it may be worth, this book is a personal analysis of a life, a living and a lifestyle of one seduced by the charms of clay at an early age. It is about experiences, images, ideas, interpretations, risks and realizations — how seemingly unrelated, or incoherent, life occurrences coalesce to form new and different life. It brings together art practices, theater practices, travel, architecture, pottery, human history, geology, mineralogy, alchemy, zoology, horticulture and

gardens. It is the story of my life in clay and the impact of events that shaped where I've been and what I've done.

It is also a love story — a somewhat unusual love story! It is about passion, intrigue and obsession. It is a story about a lust for life, a thirst for knowledge, a passion for pots, a mania for mud and minerals and a commitment to furthering the development of ceramic communication and education.

As with most love stories, its plot is full of twists, turns and subplots. It is about an all-consuming addiction to clay that began at about the age of 3 and, at the time of writing, has continued for 64 years.

Experience is like compound interest in a bank — the more you have, the quicker it grows and the more you can do with it. The greater the range of experiences, the more interesting or profound the story might be, no matter what the medium!

IMAGES

The images throughout this book fall basically into two categories: those with informative comment about how things have been done and those that are there to promote imagination and generate ideas.

Ideas don't normally come fully formed; they are usually like a seed that requires fertilization before germination can take place. I often use the analogy of the garden for just this reason. Many potters are also great gardeners who utilize the garden for generation of concepts for form, surface and color. Other than recognizing a particular landscape, bird or flower species, they are there to spark mental stimulus. Excessive words might get in the way of personal interpretive visions that may be generated through image alone.

All photography is by Judi Dyelle, except where otherwise noted. All ceramic objects and drawings are by Robin Hopper, except where otherwise noted.

PART I: THE FOUNDATIONS OF AN ARTIST

The first three chapters of this book are autobiographical by nature, starting in

Chapter 1 with formative years of development under duress, through a strange childhood and on to art school. My mixed experiences in England as an actor, travel guide, property maker, stage carpenter and village potter set the stage for a life working with clay, ending with the decision to move across the Atlantic Ocean to Canada.

Chapter 2 documents the arrival in the New World and the time spent in Ontario, both teaching and developing studios in Toronto and Hillsdale, north of Toronto. After nine years in Ontario, Chapter 3 sees a move to Vancouver Island on the Pacific West Coast and subsequent developments there with larger studio space, further international teaching opportunities and a career extension as a writer.

Chapter 4 looks at the role of guides, gurus, mentors and role models in various fields that have had major impact of my thought processes, while Chapter 5 examines lifestyle choices made to fulfill a journey as a studio artist.

PART II:

SURVIVAL TACTICS

Chapter 6 looks at the development of the line of defense; it explores the range of functional pottery that I have developed and that is in current production.

Chapter 7 is a view of the ideas and considerations that need to be taken into account as a maker of domestic ware. It is about the attention to details that determines the quality of the functional object.

PART III:

CONCEPTS OF STRUCTURE AND EMBELLISHMENT

Chapter 8 delves into form and the various approaches to the design of objects and their volumes. Proportion, ratio, architecture and geometry show mathematical structure. Organic forms of various types are analyzed in relation to the historical ceramic object.

Chapter 9 examines the development of surface.

Chapter 10 explores considerations of color and the development of ideas.

PART IV:

THE DEVELOPMENT OF IDEAS: FROM CONCEPT TO REALITY

Chapter 11 is concerned with the line of attack and my primary sources of new ideas for one-of-a-kind work — historical and ethnic ceramics, architecture, landscapes, seascapes, cloudscapes, gardens, geology, mineralogy and zoology.

Chapter 12 is a view of eight different series of work: Colored Clay Variations, Mocha Diffusions Series, Landscape and Seascape Series, Sculptural Series, Oriental Series, Garden Series, Classical Series and Southwest Series.

The Conclusion provides a fitting end. The Chronology and Index round out the book.



PART I

THE FOUNDATIONS OF AN ARTIST



“There are only two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle.”

-Albert Einstein

CHAPTER 1

THE FORMATIVE YEARS: 1939-1968



Boy with “Mickey Mouse” Gas Mask, c. 1940. Courtesy of The Imperial War Museum, London, UK. (D 5894)

You may be wondering why I chose to start this book with the preceding image — a somewhat frightened little boy wearing a gas mask. Images like this are among my earliest visual memories. There were hundreds of them. This little boy may, or may not, be me. If he is not me, he is certainly my alter ego I identified with as soon as I found the image during my research. The photo was taken in London,

England, early in the Second World War.

As with all London-area children between ages 3 and 5, I was issued a gas mask just like that. It was made of smelly, red rubber and had a blue nose flap that I remember clearly to this day. It fluffed up my hair and made my ears stick out like Mickey Mouse. I had a knobbly white sweater just like that. The sense of foreboding in his eyes reflected my own as we were drawn into a period of time and events that inevitably and unmistakably set the direction for my future.

BOMBS, DOODLEBUGS AND ROCKETS — AN EXPLOSIVE WAY TO START A CREATIVE LIFE!

I had to become what I became in life. There didn't seem to be any option. My life seems to have been a journey over which I have had only limited control. There was someone else pulling the strings and leading me to places that I was supposed to go, helping me learn an odd and diverse assortment of skills that I would need on the journey and making me do things that I was meant to do.

Fortunately, I didn't fight what seemed to be inevitable. It has been a great ride, with many interesting excursions on the side. There is little doubt in my mind that I would not have changed much, even if I had been in full control. I'm not at all sure that I would have had the audacity to follow the paths that I have been led down at the times the opportunities arose. A complex combination of serendipity, luck, highly focused work and more luck has led me along.

By the age of 3, I was intoxicated with the possibilities of what clay could be made to do. I've spent the last 64 years exploring that potential, and I'm a long way from exhausting it yet!

A major part of the first six years of my life was spent dodging bombs and dealing with images of death and destruction, along with the sense of abandonment brought on by the removal from family and friends. Although much of what I saw and what happened to me during World War II was to some extent fun — like standing on top of the backyard air-raid shelter with a plastic Tommy gun in hand, pretending to shoot down enemy aircraft in a background of firework-like flak from ground armaments — most wasn't.

This time period of the good, the bad and the ugly made deep and lasting impressions in a very young mind. For about 45 years I pushed them to the farthest depths of that mind. Both mental and physical scars have left their mark. Most of my 60 years after the war has been spent trying to eliminate those images and experiences from my mind, trying in some way to right the balances and create a life where peace, tranquility and beauty are of primary importance in an

increasingly hostile and malignant world.

This is my story of survival, acceptance, renewal and rectification — a strange and often haunting journey. Any life experiences may be bent to serve a creative purpose; some may need more bending than others! My life has had many twists and turns, and it has taken me into several types of work and many places of interest. Accident, luck and the ability to spot opportunity have been my greatest allies, but you have to learn to read the signs as they come along. Different decisions could have produced a very different life. I could have stayed with many of the varied opportunities presented to me and probably had a productive life in any one of them. The famous British potter Bernard Leach is reputed to have once stated, “If you changed your mind about how you work with clay every second day for a period of not less than 80 years, you need never cover the same ground twice.” Hearing this at the time that I did was one of those lucky accidents. I’ve now been exploring ceramics for about threequarters of that time period. There is still much left to discover. I hope that my remaining years allow me to complete my journey as a potter.

The excitement of what may yet come both greases the working parts and stimulates the mind. This book primarily tells the story of what has gone before. I feel confident in the knowledge that this review of my life and work will stimulate new directions that I will follow until all breath is spent from this aging body. After that, it, too, will be consumed by fire.

If parts of this autobiography seem confused and baffling, it is because that is the way my life has usually been. I’ve always operated at a mile a minute in several different directions or layers at the same time, half expecting the whole thing to come crashing in at any moment! Continually on the run, there has been little letup in the fine line between chaos and madness!



Neighbors in gas masks, c. 1940. Courtesy of The Imperial War Museum, London, UK. (HU 36137)

A CHILD OF WAR

I was born early on a Sunday morning in late April 1939, the first of fraternal twins. Unfortunately, my twin sister, April, only lived for 10 days due to internal complications. This was my first experience of loss. On Sept. 3, 1939, exactly 19 weeks after my birth — give or take an hour or two — Britain declared war on Germany. The declaration of war started a catastrophic conflict in Europe that lasted for nearly six years — the whole of my early childhood. During this period, London saw civilian death and casualty toll equal to 11 times the losses at the World Trade Center in New York on Sept. 11, 2001, or the equivalent of two 9/11s per year for five-and-a-half years.

During the many months leading up to the anticipated confrontation, plans were made for many eventualities. Adults and children were issued gas masks in the event that enemy bombing might include similar gases to those used in the trenches during World War I. Surreal images of crocodile lines of children marching around town wearing identification labels and gas masks — red and blue Mickey Mousestyle masks for those under 5, ominous black for older children — were a

regular occurrence as we all rehearsed the process for donning and wearing them.

Children were sent all over England and overseas to nonstrategic areas, primarily country towns and seaside resorts, to live with families that were usually unknown to them. Within four days from the outbreak of war, 3.5 million children were evacuated from inner London. Although daily and nightly bombings were sporadic all through the war period, the main bombardments took place between July 10, 1940, and May 11, 1941, in what was referred to as the London Blitz and The Battle of Britain. During the quieter war years in London, from 1942 to 1944, life seemed to carry on normally as much as possible, although there were always intermittent bombings.



Children being evacuated from London. Courtesy of the Imperial War Museum, London, UK. (D 2592).

For most of the war, my family lived in an area in southeast London that bordered on the countryside and was in the direct line of enemy bombers making raids toward Central and East London. Aerial combat, or dogfights, went on overhead almost continually, resulting in destroyed planes or parts of planes falling all around the area where we lived.

The falling bombs exposed the blue clay on which London is built, as well as all manner of small creatures, which, for me, sparked an early interest in natural history. That blue clay and hot shrapnel became two of my favorite — if not only — toys for most of the war. Clay and super-heated materials have been my constant

companions ever since.

During this time, my mother was running the family grocery business, as my father was involved in the war effort. My siblings had various jobs to do, too, and one of my brother's jobs was to take me to and from kindergarten. One afternoon, just after he had picked me up, we heard a doodlebug cut out above our heads. We ran to the nearest shelter and had just reached the door when the German buzz bomb hit the school we had just left, killing all still in it and destroying the building. We were blown down two flights of stairs and received cuts, bruises and mild concussions in the process. Our injuries were quickly patched up by the medical crews — not the most elegant sewing-up job I've ever seen — and life went back to "normal" after our lesson in survival tactics. These wartime scars attest to the bumpy ride of life and a long-term reminder of my first brush with death.

Shortly after this episode, there was a second evacuation of children to places that were deemed safer. My oldest brother, Roy, became a trainee chef at a large country hotel that had become a U.S. forces command center. My second brother, John, helped my mother run the family grocery business. The remaining four of us were scheduled to be evacuated to northern England. In typical rebellious fashion, I caught the chicken pox the day before evacuation, and I was prohibited from going. The family was split up, with my brothers going to a family in Leeds and my sister going to a family in Grimsby.

Nearly two years later, when my siblings returned after the war, I didn't know them; they had temporarily adopted the dialect of the North Country, changed physically from a different, high-starch diet and lived separate lives from mine. They became intruders in my home. The long-term effect of this enforced separation was both positive and negative, in that it forced early self-determination skills, and, at the same created an inherent distrust and phobia of being left alone.



German V1 rocket, rocked about to be launched from Northern France, c. 1944, courtesy of The Imperial War Museum, London, UK. (BU 10769)

None of us ever talked about our experiences of these times, but they indelibly formed both me and my widespread early interests. For the last year or so of the war, the London I experienced had almost no children in it. In this dangerous, surreal background, I felt abandoned, almost orphaned. I became benignly aggressive and fiercely independent — character traits that have never left. At the age of 6, it seemed that I had become a permanent loner.



Bomb damage in London, courtesy of The Imperial War Museum, London, UK. (HU 36188).



Bomb damage in London, courtesy of The Imperial War Museum, London, UK. (KY 14572C).

A large, old house in the village of Woodside Green, across and a little down the road from my parents' grocery store, became a rest and recovery center for traumatized U.S. soldiers on medical leave. It also became a place of refuge for me. Since I looked and acted like a waif, it was easy for me to bum chewing gum and chocolate, gems of life normally forbidden through rationing. My memories are

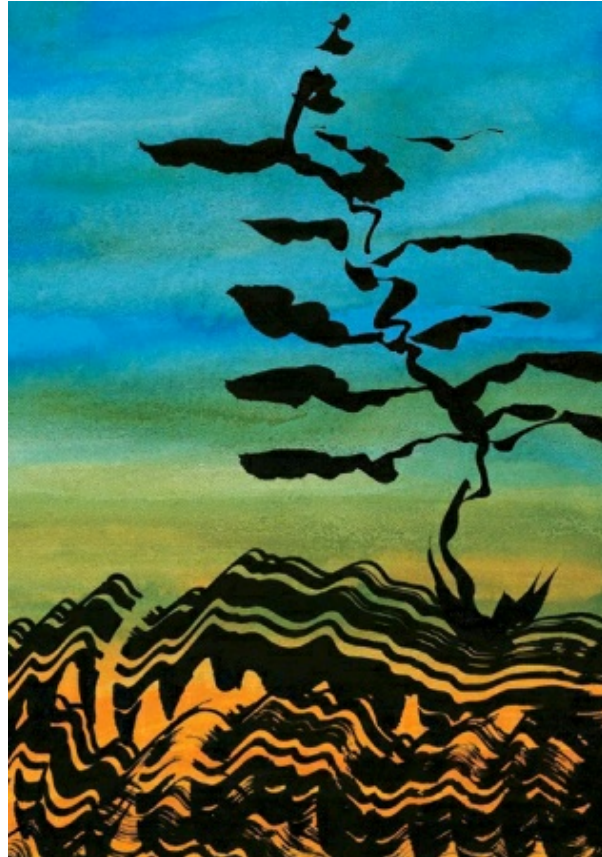
of psychologically battle-scarred people needing the warmth and friendship of others, but rejecting it at the same time. I felt quite at home around these lost or distressed souls. On a more positive note, the interesting sounds of American music came from the open doors and windows of the house. It was my first introduction into the world of jazz, blues and swing — a love affair that has lasted to this day.

The war in Europe finished on V-E Day, Tuesday, May 8, 1945, 16 days after my sixth birthday. Street parties with celebratory bonfires were lit all over London, including one in front of the cenotaph on Woodside Green, directly adjacent to my parents' store. I remember one woman dancing wildly around the flames. She wore nationalistic red, white and blue bloomers that she removed and threw into the fire in a combined gesture of defiance and elation.

PRIMARY EDUCATION: 1945-1950

According to family legend, I was sent home on the first day of primary school for inappropriate behavior. I thought that I was conducting a scientific experiment to do with elementary ballistics! At recess, I was caught filling balloons with water and lobbing them into crowds of girls on the playground. My mother was called in to explain my misdemeanor. When the principal was informed that I was the youngest of five boys in the family — obviously, it wasn't entirely my fault — I was let off with a caution and allowed to return the next day. My brothers got the lion's share of the blame for teaching me naughty tricks, but it was wholly my idea.

And thus began my primary education from 1945 to 1950 at Woodside Green Elementary School, just three minutes' walk from home. This was a regular primary school program with much attention paid to the arts, culminating with the 11-plus examination before secondary school. Through the wide art interests of my first art teacher, Mr. Moir, a rotund, brilliantly redhaired, walrus-mustached, demobilized Royal Air Force squadron leader, I learned to express myself through various art media, from clay modeling to introductory painting.



Copy of artwork from primary school; water color, wash and ink drawing.

My sculptural clay models of animals and people were often chosen to grace the showcases of school corridors. Early painting courses led to a great love of two-dimensional art and the layering processes of printmaking. A self-hardening clay paste, similar to FIMO modeling clay, provided me with extra pocket money as I made, painted and varnished floral jewelry that I sold through local hairdressing salons. I also learned the processes of paper sculpture and made many window dressing details for my parents' grocery store and other local stores. Paper sculpture is a good, relatively simple and inexpensive method of creating three dimensionally.

Since I was living an easy bus ride from many of the major museums of Central London, Mr. Moir encouraged me to visit them. He was the first person who made me understand the importance of creative art to humanity: Without it, we are just animals! I've had a love affair with museums and their contents ever since.

The first museum where I can recall spending time was the Horniman Museum in Forest Hill. It was the private collection of a Victorian-era tea and spice importer who traveled the world on business and collected art and artifacts on the way, developing a very impressive collection of ethnography and tribal human culture. It

was here that I first fell for ceramic objects of many cultures, particularly those objects painted in red, black and white symbolic patterns and images. I didn't know what symbolism was at the time, but the images were compelling. Black, red and white became my favorite trio of colors and remain so to this day.



“Acoma Storage Vessel,” New Mexico, earthenware, late 19th century, private collection. Photo by Janet Dwyer.

As we had all just come through a lengthy and bloody war, and probably because young boys are usually intrigued by things made for barbarism and violence, I decided that the Imperial War Museum would be my next museum of choice. I could get there on the No. 12 bus in about 20 minutes. Here I could see the objects that wrecked so much of my urban environment. Guns, bombs, knives, tanks, armored carriers, aircraft — all were there for my personal scrutiny. There were thousands and thousands of photographs and a huge variety of paintings done by many of the most famous British artists alive during the times of conflict. Visits to the War Museum became almost weekly Saturday events in my life.

Unlike most other boys, I wasn't at all interested in team sports; I saw them as training grounds for violence. As an odd, fiercely independent child with few friends, I was usually stuck in the goal for soccer, where people kicked things at me, or behind the wicket in cricket where hard, leather-coated balls were constantly aimed in my direction at high velocity. I'd had enough of being someone's target for several years. When I proved my total inadequacy as a goal or wicket keeper, I was removed from the teams, and I received my physical exercise through walking nature trails and chasing rabbits on a nearby golf course.



Robin Hopper as soccer champ.

During one of my addictive visits to the War Museum, a security guard asked why I came so often. I told him that I was fascinated by the material shown there, which was made for the explicit purpose of killing people. He suggested that I visit the Victoria and Albert Museum. “There they had beautiful things for killing people, engraved knives, spears, shields, lances, swords, chain mail, helmets and armor for man and horse. Much was adorned with silver, gold and semiprecious stones,” he said.

The guard was right; there was much beauty in the objects made for self-preservation and inflicting death. The Victoria and Albert Museum became yet another favorite stomping ground. I quickly found that there was so much more than just implements of warfare. There were representations of the needs for daily customs, religious and secular rituals and the social lives of mankind over centuries, if not millennia, from all corners of the world.

A little later, I visited The British Museum, perhaps the ultimate center for the study of humankind since prehistory. I had become a museum junkie, hooked on all that I could see, learn about and absorb into my soul and visual memory from cultures past. As I saw it, pots were the connecting rods between nations. All this culture was mine to appreciate by the age of 12 — such riches for one so young and such a storehouse for further exploration. Across the street from the V&A Museum are the Natural History Museum, the Science Museum and the Geology Museum. All later played significant roles in my life and work. I am still a museum

junkie. I have been fortunate to spend so much time in many of the world's major museums, researching and studying.

During the last year of primary school, all students were required to sit for the 11-plus examination to determine academic ability for the next stage of school life. My parents were called in to discuss my future direction and informed that I didn't show much academic potential, and that I should register for an education format leading to developing a trade. I passed the exam with flying colors — enough for the more academic grammar school, a breeding ground for higher-level learning and professional futures. But having been signed up for trade school development, that is where I went. For me, it was perfect.

SECONDARY EDUCATION: 1950-1955

As my test scores showed some academic promise, I was put into the academic stream. Depending on aptitude, we were put into either sciences or arts and humanities. Because of previous work and a consuming passion for art, arts and humanities is where I went, leaving no opportunity for math and science courses. In retrospect, this would have been very useful; I could have balanced my books properly and breezed through glaze calculation, even when it took a slide rule to do it! It would also have opened other doors that I became interested in, such as archaeology and zoology.

However, I was quite happy with my direction, since it included English language and literature, French, theater arts and various aspects of the visual arts, particularly drawing, painting, printmaking and crafts. My education was mostly about passions that I had developed through the first 11 years of life.

Music was another passion, but it wasn't offered at the school I attended. I found out that the local Corps of Sea Cadets had a drum and bugle band — if you can call that music — so I joined and rose to the post of chief bugler over a four-year period. I was boosted to drum major until I dropped the silver-topped mace during a church parade and was returned to the rank of chief bugler. With a tight lip, a good set of lungs and dexterous fingers, it seemed natural to turn to the trumpet as my instrument, and I dreamed of stardom in jazz circles. Unfortunately, time ran out on me, as I already had far too many interests that I was passionate about, but, even now, I invariably carry a trumpet mouthpiece with me in case the opportunities arise for noisemaking or even primitive music making.

The experience in Sea Cadets taught me four important things — three negatives and one positive: I didn't like anything martial; I didn't like uniforms or uniformity; I didn't like being on water on anything less than a 200-foot vessel; and I learned

how to tie an enviable variety of knots, most of which I have never had the opportunity to use and have probably forgotten how to do anyway.

My secondary school was Ashburton Secondary Modern School, a large coed establishment with a five-year program and an option after two years to transfer to a trade program in a polytechnical college. I didn't take this option, as I was able to choose from humanities programs. I particularly loved English language and literature, both taught by Mr. Alec Bryceson, as well as art, taught by Mr. Nicholas Neech. The fact that I later became both a professional artist and writer is directly attributable to these two strong teachers.

Throughout secondary school, I also developed a strong interest in theater. I took part in all school productions, from William Shakespeare to Nikolai Gogol, Anton Chekov and Noel Coward, playing a variety of roles, male and female, major and character. Theater gave me the ability to deal with audiences — an extremely important asset for a teacher. Without realizing it, I was lining up all of the skills necessary to become an effective educator somewhere down the road!

I also became totally fascinated with the natural world. I was always interested in animals, particularly the monkey family, and I felt that I would probably become a zoologist working with and researching primate behavior. I even began to learn the Swahili language in long-term preparation for possibly working in East Africa. I was a moderately good student academically.

At the end of high school, my parents went to see the principal and asked, "What's he going to be useful for?" The answer came back: "Not much, but he has a good facility in art that should probably be encouraged!"

It was suggested that I go to art college. I didn't know anything much about art college except that I had a friend who had gone for a while and came back with glowing reports of naked women! This was not the student body; it was, of course, the life drawing and painting classes, where the more flesh and folds there were, the more interesting a subject the model became! As a testosterone-charged, 16-year-old male, this sounded like a good place to develop my embryonic artistic talents, so that is where I went. The thought of possibly making my living having fun was an intriguing concept.

CROYDON COLLEGE OF ART: 1955-1961

My primary art studies were in painting, drawing, museum studies, sculpture and printmaking — including etching, engraving, drypoint, wood engraving and lithography. I thought that I would become a painter or printmaker.

At the end of the first year, the college moved to larger spaces in three different

venues. The pottery department — which I didn't even know existed — was closed down and moved along with printmaking and sculpture to an old Victorian mansion that been the home of one of Charles Dickens' more important illustrators, George Cruikshank. The central college location was another, even larger, magnificent Victorian mansion set at the top of a beautiful park surrounded with superb trees and wonderful shrubs. It was the former home of Lord Frederick John Horniman, founder of the Horniman Museum. Courses in drawing, painting, some printmaking and academic studies were held there. The life drawing studio was a large, wisteria-draped conservatory. The third venue was an old church that became home to fiber arts, theatre arts and bookbinding. The ghosts of ancient aesthetes inhabited all three places and set the tone for distinct personal growth.

In closing the old pottery studio, the uncollected bisque-fired student work was sold off. I bought a few pieces and took them to a local pottery and asked if it might be possible to glaze them. I had no idea of the process, but Geoffrey Maund, the potter/owner, said they could do that. While there, I thought it looked like an interesting place, and I asked Mr. Maund if there was any possibility of a summer job. He replied that he could take me on, but he couldn't afford to pay me. (I was living at home and didn't realize that it cost money to stay alive!) When I asked what the job might entail he covered his mouth and, almost inaudibly, replied, "Wedging," I didn't know what wedging was, but I felt certain that I could do it.

Some people would describe wedging as sheer masochism. I got a job doing it for a whole summer, from 8:30 a.m. to 5 p.m. five days per week. This menial process prepares the clay by hand for working on the potter's wheel, much as kneading is the starting point for bread making. This wasn't the nice, fresh, clean, boxed clay that most potters have come to use; it was what had been stored in old bathtubs and garbage bins for years, complete with old leaves and bits of vegetation, old cigarette butts and who knows what else. It was my job to get this mess of mud into a good working state for the throwers. In return, they gave me lessons at lunchtime on how to throw pottery on the wheel.

By the time summer ended, I was thoroughly hooked on the cyclical nature of the materials and process. I decided to change course from drawing and painting to ceramics. Masochism or not, I had touched base with the clay of my early childhood, along with the clay-based jewelry making phase that came between. I was hooked, and I instinctively knew that this would become my life's direction and primary addiction. Confident in the direction I was planning to go, I became the first student member of the British Craftsmen Potters Association in 1957 at the age of 18. This gave me the opportunity to meet senior members of the British clay

world, and to understand the importance of organizations in making things happen. The CPA stressed highquality work and professionalism. The individual artist is often at a disadvantage working in isolation. The organization provided an almost family interaction. I quickly realized the value of organizations as a support force for security, strength in numbers and a continual opportunity to learn and give back in return.

After that first summer job at the pottery, I spent my summers hitchhiking all over Europe, increasing my language skills, visiting museums and art galleries from Scandinavia to Rome and generally having a good time enjoying the varied landscape from mountains to tundra. For anyone born in a country without thousands of years of history behind it, it is likely quite difficult to understand just what an important part of one's makeup that history is. Walking the streets that the Romans built 2,000 years previously and visiting architectural gems even older gives one an intense appreciation of time, history and mankind's amazing cultural developments. For three months in 1958, I lived with a group of other international art students where we camped under Pont Neuf, one of the central bridges in Paris adjacent to the Notre Dame Cathedral. I was basking in the arts, architecture and landscape of northern Europe in one of the world's most exciting and beautiful cities. Life was good!

At the end of the summer of 1958, I was asked to guide new students on orientation tours of the central college campus. Wearing a large purple sweater, lilac shirt, dogtooth-check pants and sandals and smoking an antique German Meerschaum pipe carved in the form of a satyr, I thought that I was the epitome of what a real artist should look like! In one of the groups I escorted was a new painting student named Susan Moore. Little did I know it then, but this was the first time I would meet my future wife and partner, an attractive, welleducated young woman with a passion for paint. We became very good friends. Sue and her mother were avid gardeners. Their addiction was passed on to me, and gardening became another lifelong obsession, with an early promise to myself to develop a really beautiful garden as one of my major life's goals.

Along with my main focus of pottery, I continued drawing, painting and printmaking through three more years of school. At the time, acrylic paints were only just starting to be available in England, and the usual medium was oil paint mixed with turpentine. I was physically nauseated by the smell of this mix and quit the painting studio in favor of clay. I've subsequently realized that the ceramic medium offers as much as, or more than, any other art media, but is a particularly demanding combination of art and alchemy.

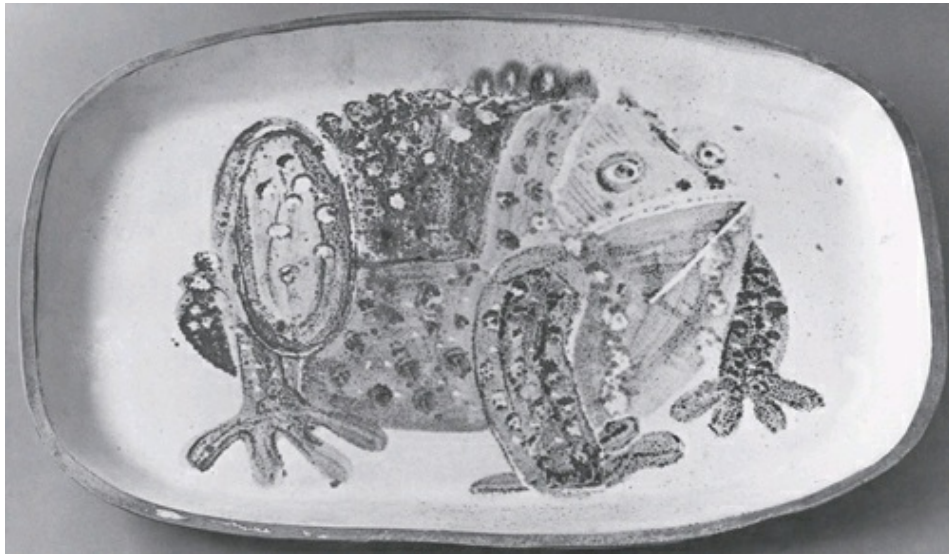


Robin Hopper, student work, "Bowl," 1958, stoneware with pigment brushwork. Size: 5" high x 6" wide.

The theater design department of the college selected a couple of plays per year for the students to design and produce. They were always looking for actors to fill the roles. With my previous theater experiences in high school and with amateur theatre groups during my early teens —plus an ongoing desire to hide in the role of another person or character — I was a natural. Mimicry had always been part of my *modus operandi*. Thinking to the future and my desire to develop my own studio, I had to look toward alternative ways to make an income. Nobody told me that you couldn't make money in the theater, so I looked toward that direction. Wherever possible, I audited courses that dealt with backstage theater arts, such as scenic design and construction, scenic painting, costume design and fabrication, millinery, property making and theater lighting. I managed to pick up a smattering of all these skills, and, when I later found myself working in professional theater, I could be hired year round, where most actors were usually only employed as actors for three or four months per year.

There were two national examination hoops that one had to jump through to get the equivalent of a degree. The first was the Intermediate Examination, taken toward the end of the second year of study. The second was the National Diploma in Design that usually took a further two years, but because I changed course from two-dimensional arts to ceramics, it required three years.

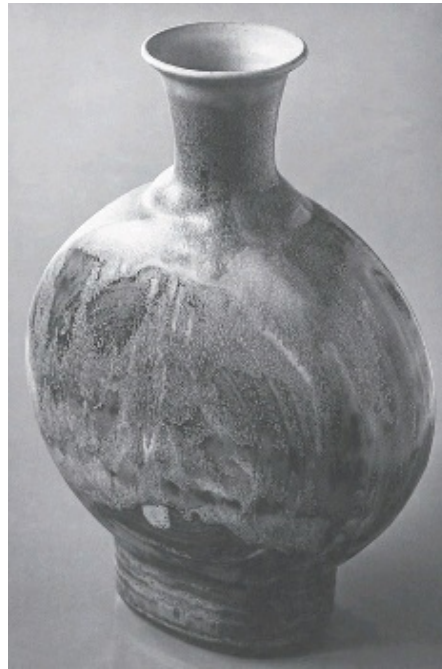
As I was behind the other students who had taken pottery for an extra year, I had to work doubly hard to catch up, so I was given the keys for the studio and told to get on with it. After about four months of high studio activity in ceramics to the exclusion of just about everything else, I had more than caught up to the other students, at least in the area of throwing. Here, the work was very disciplined, and we were not allowed to keep anything until we could reliably and routinely throw cylinders 6" (15 cm) wide and 18" (45 cm) tall. Once you can manage that, you can throw almost anything. The discipline involved in getting to this point is severe, but it forces a strong commitment to doing what you really want to do. The department was small with few students, mainly aiming toward design jobs in the ceramics industry. The instructor was Mr. Arthur Barnett, a refugee from that industry who principally designed the patterns that were put on Wedgwood and Spode — about as far removed from the studio pottery movement as you could get and still be in the same business. He was one of the best constructive critics I have ever met, so I could forgive any other limitations that were evident. Discussions on aesthetics were brilliant, but almost anything technical was out of his line. The department was equipped with a 12-cubicfoot top-loading electric kiln and a 60-cubic-foot downdraft gas-fired kiln jammed into a far-too-small room. After Mr. Barnett experienced a few near explosions and much excessive heat, the job of firing all the kilns was turned over to me, as I was the only male in the class at the time, and fire was considered men's work! It stayed that way until the end of my schooling.



Robin Hopper, student work, "Toad Plate," after a Picasso lithograph, 1959, stoneware with painted and wax resist decoration. Photo by Terry Rand. Size: 12" high x 18" wide x 2" deep.

I didn't realize until much later, when I was about to set up my first studio, how

much I didn't learn during those college years. The drawing, painting and printmaking studies were fine, but in ceramics, the only thing I learned about glazes was that the teacher came up from the basement with a bucket full of different-colored powders, and I was told to add water and sieve it. When I started my first studio, I had to learn on the job. Fortunately, the studio pottery glazes that most people used at that time were pretty simple — celadon, tenmoku and high alumina matt, or Rhodes 32, as it was usually called. But I'm getting ahead of myself — a whole other career possibility presented itself, followed by yet another!



"Pilgrim Bottle," 1959, stoneware with iron and wax resist decoration. Photo by Terry Rand. Size: 15" high x 10" wide x 4" deep.

As a student of fine arts, I vowed that I would never do production work and prostitute my art by making a range of domestic wares such as mugs, teapots, cream and sugar sets and pitchers! I thought I was above all of that, and I was going to produce "real art!" What I didn't know was that few people were buying "real art," even if I had the skills and visualization to produce "real art," which I didn't. It takes a lot longer than five years to become a "real artist".

Somewhat crushed by this realization, I came to the conclusion that if I wanted to make ceramics my chosen life's work, there was only one way to do it — develop a range of functional work that I was proud to produce, that worked well, that could be produced efficiently at a reasonable price and that could be as beautiful in its own right as any artwork. This was a stiff challenge indeed, but it has kept me going for nearly 50 years, and much as I may occasionally moan about it, I am

somewhat beholden to the philosophy that the potter is a servant of the society of which he or she is a part. There is a great joy in making things for others to live their daily lives with in the daily rituals of the home. Cooking, serving, eating and drinking from handmade objects brings the maker and user into a close, unseen, tactile dialogue. Although I can now make and sell more or less anything that I like, I doubt that I will ever cease doing some production work for the rest of my working life. I find a particular satisfaction in the making of functional ware that is quite different from one-of-a-kind artwork, although I really enjoy both. Interesting how one's values change over time!

During the last two years of my student life, I needed some income to sustain my studies. With my previous amateur theatrical experiences, I got a part-time job in stage management and a small part acting at a beautiful old Victorian playhouse, the Grand Theater. Another experimental theater opened up, the Pembroke Theater In The Round, at about the same time as the old Grand met the wrecker's ball in 1959. I started working at the Pembroke doing small parts and stage management, primarily in contemporary plays and new material. I was there when they produced a new American Broadway hit in its British premiere. The play was "Inherit the Wind," and I had a small role and served as assistant stage manager. I was now a unionized professional actor! The play transferred to the West End, London's theater district, and I transferred with it. I had started professional theater life on the British equivalent of Broadway, even though I was in my final stages of the National Diploma in Design and knew it might cause me to fail my degree. On one of the main days of the NDD art exam, I had to perform two shows as well. I was told that I couldn't leave the exam room early even though I had finished the project. The professional actor in me walked out of the exam room and went to work. My independent spirit caused me to fail the exam. Fortunately, it had no real subsequent effect whatsoever on my life as far as I can tell.



Robin Hopper as actor, 1960. Photo by Robert Pitt.

WORK EXPERIENCE:

1960-1968

My somewhat weird and surreal childhood, filled with many deep and unusual images and interests, led almost inevitably to a complex combination of employment and self-employment. My 10-year working life in England was extremely convoluted, continually changing from one challenge to another, but it was always interesting. It bounced from theatre to travel to pottery making and back again. I've no idea how I packed it all in, but the excitement of the various directions that life took seemed to make it seamless fun, and I have always been a workaholic.

As far as I can recall, the pattern of life was theater from December to March; studio property-making in April and May; travel guiding from June to September; more studio property-making work in October and November; and a return to theater in December. I certainly didn't have time to get bored. I could have chosen a number of different directions for my longterm career path. However, clay was my first love, and clay was what I returned to, but the first 10 years of intensive work were a wild and wonderful sequence of experiences that added immeasurably to my future world of ceramics and ceramic education.

"Inherit the Wind," which played at the St. Martin's Theatre in London's West End, had a relatively short run, after which I returned to the Pembroke as stage manager, later becoming the stage manager for the new Peggy Ashcroft Theatre in

Croydon. This theater was part of a large entertainment complex with theater, concert hall and art gallery. It was one of the major venues for important visiting performers. I kept up my love affair with jazz, as most of the more important American jazz musicians performed in the concert hall. One after another, I was able to see the major stars and orchestras of the time including Duke Ellington, Count Basie, Earl Hines, Billy Eckstine. Benny Goodman, Stan Kenton, Louis Armstrong and The All-Stars, Tommy Dorsey, the Modern Jazz Quartet, the Glenn Miller Orchestra led by Tex Beneke, as well as singers including Ella Fitzgerald, Peggy Lee, Sarah Vaughan, Nat "King" Cole, Jimmy Rushing and Big Joe Williams. Many times I was also able to watch these incredible musicians in rehearsal quietly from the back of the hall. Talk about magic moments in time! To watch the Duke Ellington Orchestra in rehearsal when most of them had been playing together as a group for 30 or more years made me realize that to arrive and continue at the top of one's field in any artistic endeavor requires constant vigilance and growth.

Sue and I had married in 1961 and started a young family by this time. As the acting profession was tenuous at best, I decided to focus on working backstage for financial security. The theater arts skills that I had learned in art school proved to be very valuable in the professional theater world, and I was able to work on many shows making props and doing scenic design. There was no end of possibilities for work. In 1963, I was asked to become the property master for the seasonal London production of "Peter Pan," the 1904 play by J.M. Barrie. This took place at The Scala Theatre on Charlotte Street with a London season, followed by touring the provincial theaters of England, Scotland and Wales. The following year I became stage carpenter for the show and ran the backstage for five years of "Peter Pan," both in London and throughout the provinces. During this period, I also worked on productions of "Compulsion," "Look Homeward Angel," "Man and Superman," "La Bonne Soupe," "The Ginger Man," "Fairy Tales of New York" and "Finian's Rainbow".

Part of my love of theatre was in the buildings themselves. Often fanciful and gloriously rococo or baroque with domes, arches, huge chandeliers and sculptures, they are places of magic and mystery. Many British theatres are built into the shells of other buildings or are abutted to walls of former buildings, often churches. The right stage wall of the Theatre Royal in York, complete with filled-in Gothic arch windows, is the wall of a former Gothic nunnery in which a young nun reportedly was bricked-up alive for having given birth to a child. Her ghost of a gray, shrouded figure walks through the backstage of the theatre and the streets of old York, near the huge Romanesque cathedral. I didn't believe in ghosts until I saw

her standing next to me during a dark scene in “Peter Pan.” Originally a skeptic about paranormal phenomena, I quickly changed my opinion and realized I was quite psychic. Pottery shapes suggested by shrouded or caped figures or full-length historical costumes have been part of my form repertoire for half my life.



During the years spent in the London theatre world, I was fortunate to work with many of the top British actors, actresses and musicians of the time. While I was working at the Scala Theatre, I had the opportunity to work on the Beatles’ first film, “A Hard Day’s Night.” I was part of the stage crew that built the set. John Lennon, Paul McCartney, George Hamilton and Ringo Starr were in their early 20s, and it was the beginning of Beatlemania, so life backstage was great fun. Through a mutual friend, actress Jane Asher, I suggested that Paul take up pottery making to cut back on stress levels, but that didn’t go anywhere. However, my time with the Beatles stuck with me long after the movie. Part of the “Hard Day’s Night” stage set was used in a kitchen renovation that I made for our country property that also became my first studio and gallery.

Many people who worked backstage in the theater during the winter season were transient, doing other jobs in the off season, such as working as travel guides, or couriers, taking tourists all over Europe throughout summer. When I talked with a number of them in the greenroom at the Scala Theatre, they asked what my long-term plans were. When I said that I was saving up to get my first studio together, they replied that with my knowledge of Europe and languages I could make a good summer income as a travel guide and get my studio up and running more quickly. I

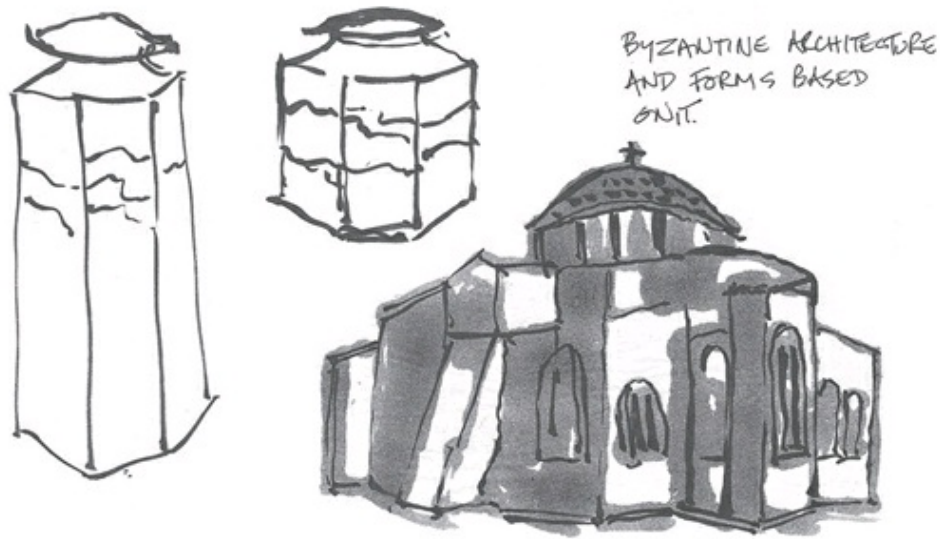
found a job with a high-end travel company escorting arts and culture tours throughout Europe, from Moscow to Madrid, Paris to Pisa, Lucerne to Lisbon and Rome to Rouen. It was the beginning of the boom in European travel by luxury buses. Since I was more or less fluent in French, my first summer was spent in northern France, Normandy, Brittany, Paris and the chateaux country of the Loire Valley. I got to be quite the expert on the battlegrounds of the two Great Wars, as well as French architecture of the great cathedrals and castles. In subsequent summers, I worked my way through the rest of Europe, including a trip to East Germany, Poland and Russia the first year it was open to Western tourism after World War II.

Travel guiding went on for six summers. I reveled in the stunning landscapes, incredible architecture and wonderful museums and art galleries that I found everywhere I traveled. I stayed in good hotels and ate in excellent restaurants. (And I put on weight that I haven't been able to shed yet!) Memorable stories and visual images linger to this day, and I could easily fill a book on this part of my life alone. I learned a great deal about people, food, wine, landscape, art and architecture, but I was away from my family four to five months each summer.

Between my summer work as a travel guide and the two to three months each year that I was away in the theater business, I earned the money to buy a new property and get back to clay. It had been a very interesting period of time, a lot of fun and a great means to achieve my next goal. Unfortunately, these lengthy absences greatly distanced me from my family and perpetuated the isolation of my own childhood, although I didn't realize it at the time. It was now time to stay home and build toward the future.

When I was in the theater world, many people told me that you couldn't make a reliable living, and I managed very well. I easily could have stayed there. Nobody told me that one couldn't make a living as a potter, so with the power of positive thought and much hard work, I always have.

In 1964, we found a semi-derelict country property, renovated it and started to develop my first pottery studio. This property was a small, deconsecrated Zion Primitive Methodist chapel built in 1853 and sandwiched between two cottages on the only road through the middle of a small village in Berkshire named Kintbury. It was there at least a thousand years ago and was written up in the famous Domesday Book started in 1086 A.D., a survey of the life and times of early French domination, done at the behest of King William the Conqueror.



In conjunction with a local architect, Patrick Sweetnam, I designed the renovation of the tiny chapel and cottages into a two-bedroom house, with a studio and gallery attached, plus a garden. It was all very small, but it allowed me to get started with the pottery.

In the beginning, my tiny studio had to be a multifaceted one. At one point, I was working on props for the West End, building a 20-footlong, fully articulated crocodile and other props for “Peter Pan” and a three-quarter scale model of a veteran car for George Bernard Shaw’s play, “Arms and the Man.” The studio was too small for both objects to be worked on at the same time, so the croc would go out on the forecourt of the studio one day while the car was being worked on, and the car the next day while the croc was being worked on. As I said earlier, my layered life has always been bordering on the insane, slightly moderated by the ludicrous. With a popular pub across the street, we quickly became the talk of the town. This, in a village of English eccentrics, took some doing! However, they got used to these sorts of shenanigans fairly quickly, and we were made very welcome for the four years we were there.

I had hardly touched clay for four years, and I was eager to start. As it was almost impossible to sell one-of-a-kind artwork at the time, I started to design and produce a range of functional pottery for the domestic market. There was no gas in the village, and propane kilns were unheard of back then, so I purchased the largest electric kiln I could afford, hung out my sign and was in business as the owner of Kintbury Pottery. I made contact with a number of galleries and stores through the

southern half of England, and business was soon going strong. With a lot of help from Sue, who did many of the jobs that have to be done in a functioning studio, it was self-supporting by 1967, and I had ceased involvement with both theatre and travel.



“General-Purpose Bowls,” 1965, electric fired stoneware, cone 8. Photo by Jeremy Mason. Largest bowl size: 6" high x 10" wide.



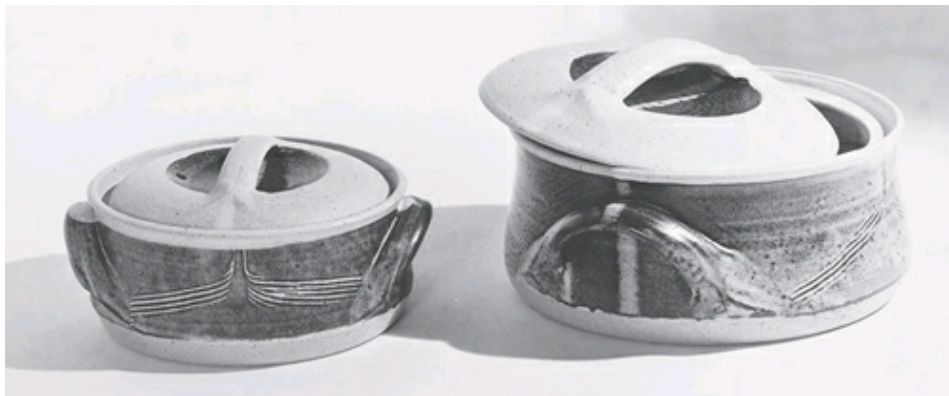
“Ramekins or Serving Dishes,” 1965, oxidized stoneware with iron slip and sgraffito, cone 8. Photo by Jeremy Mason. Largest dish size: 10" diameter x 2" high.



“Teapot, Cup and Saucer,” 1967, oxidized stoneware with wax resist brushwork, iron banding and satin matt white glaze, cone 8. Photo by Jeremy Mason. Teapot size: 6" high x 8" diameter.



“Casseroles,” 1966, oxidized stoneware with tenmoku glaze, cone 8. Photo by Jeremy Mason. Larger casserole size: 6" high x 10" diameter.



“Casseroles,” 1965, oxidized stoneware with slip and sgraffito, cone 8. Photo by Jeremy Mason. Larger casserole size: 6" high x 9" diameter.



“Sauce Boats,” 1965, oxidized stoneware, tenmoku and slip decoration, sgraffito, cone 8. Photo by Jeremy Mason. Size: 6" high x 5" diameter.



"Pitcher," 1967, stoneware with iron slip and sgraffito under white glaze, oxidation fired at cone 9. Size: 11" high x 6" diameter.



"Casseroles," 1965, electric-fired stoneware, cone 8. Photo by Jeremy Mason. Size: 6" high x 9" diameter.



"Coffee Set," 1966, oxidized stoneware with scratch-comb decoration and ash glaze, cone 8. Photo by Jeremy Mason. Jug height: 12".



“Demitasse and Saucer,” 1967, porcelain, satin matt glaze over iron slip and sgraffito, oxidation fired at cone 9.
Size: 3" high x 5" diameter.



“Teapot,” 1967, stoneware with wax resist brushwork under iron banding, semimatte glaze over, reduction fired in electric kiln. Size: 8" high x 8" diameter.

I easily could have stayed in either theatre or travel, as both were extremely

interesting and financially rewarding, but my long-term goal was to be a potter. With a small amount of part-time teaching at the Berkshire College of Art and evening classes at a local high school, I managed to develop an interesting life of opulent poverty for Sue and our two daughters, Karen and Sarah. Sue managed to fit studio work in around looking after the children. Life was both fun and creative. Four years after finishing college, I finally had my first studio together! As the pottery business developed, I no longer needed to continue to work in the variety of directions that I had been, and I could now focus on the pottery. For the next four years, it was pottery that kept us alive.

Even though we seemed to be doing well, there was an ominous economic black cloud approaching that would likely have made further growth impossible for quite some time. With a Labor Government led by Harold Wilson and a recession on the way, money was tight to say the least. Buyers dwindled. I quickly came to realize the value of developing as strong of retail sales as possible as a buffer to the complex ups and downs of the economy.

Having spent much time in larger environs, I was also beginning to feel somewhat claustrophobic in England. As a courier, I had worked with English-speaking people from all over the world, and I really had enjoyed Canadians in particular. Three of my siblings were already living in the Toronto area. In 1967, Montreal, Quebec, was to host a major international expo in celebration of Canada's 100th birthday as a democratic nation. It was a time of enormous activity, and the British press was full of glowing and enticing reports about it. My parents were organizers of a British Emigrant Families Association and had chartered a plane for family visitors to Canada. There was one seat left on the plane, and my parents offered it to me. It was an opportunity, and I jumped at it ecstatically.



"Casseroles," 1967, stoneware, wax resist decoration with iron banding, white satin matt glaze, reduction fired in electric kiln. Photo by Jeremy Mason. Larger casserole size: 6" high x 9" diameter.

Canada certainly had space. It was also a multicultural melting pot where a

headstrong young artist might be able to make his mark. The arts organizations were in place, and exhibitions of crafts and ceramics were easy to find. It felt as though I was being pulled by an unstoppable force to a new country. The potential of this young country seemed limitless; art and culture were hot items, and there was a vibrant, youthful, creative energy that pervaded the air.

On my return to England, I told Sue that I felt that if there was ever a time for a major move somewhere, this was it. She was reluctant, but she agreed. We passed it by our families. Since my sister and two of my brothers had already emigrated to Canada, my parents thought it was a good idea and could be an important career move. Since I always thought positive, it never occurred to me that it might fail! Sue's parents were not at all in favor of the move. I had already stolen their daughter; now, I was planning to take her to the other side of the world! After we resolved our differences, we started to make plans for an exciting major international move of family and studio.

The first job was to get the landed immigrant status in place. We had the necessary qualifications and received our papers without problem. That done, the next job was to locate a possible teaching facility — one fell out of the blue when I was offered the job of running the ceramics program at Central Technical School in Toronto. It came by a convoluted journey typical of the way that my life usually progressed.

In this particular case, my older brother, John, who had immigrated to Canada in 1958, was working as a traveling salesman for a school supply company. While driving on one of the Toronto freeways, he was listening to a radio program that was talking about the Sheridan College School of Design Craft School that started in 1967 and was doubling faculty in all departments the following year. The person being interviewed was Don McKinley, a well-known woodworker, designer and director of the new school. John jotted down the phone number and later called Mr. McKinley. I had previously sent John a photographic portfolio of my work, just in case anything might come up. He rushed it over to Mr. McKinley, who was shortly going to be visiting England with the college board of trustees to look at British and selected European art colleges. Mr. McKinley called me and arranged to interview me at my studio in Kintbury. I was second in line for that job, but it went to a very wellknown ceramist named Vivika Heino, who had 30 more years of experience than I did.

When John went to collect my portfolio, he asked if Mr. McKinley knew of any other teaching positions in the Toronto area. He was informed to contact the head of the art at Central Technical School, Mr. Charles Goldhammer. Central Tech is a

high school with a very special and unusual three-year arts program. At the time, it had the largest ceramics program in Canada and a strong reputation as an important central place in the ceramic arts education world.

Mr. Goldhammer looked at my work, decided on the spot that he wanted me on his team and called me to come for an interview, at my cost. I felt that karma was on my side, so I booked a flight for Toronto the next day. The interview was successful. After completing the necessary paperwork, I flew back to England two days later to begin the next phase of moving: to prepare a specialized, one-of-a-kind property for sale and find a buyer. It was an extremely exciting and busy time for the whole family.

Before leaving England, I made it a point to visit all of the most important studios and make the acquaintance of those who had inspired my life's journey. Without exception, these nationally and internationally recognized potters were very generous and encouraging with their time and advice. To a young artist with almost no credentials who was about to make a series of major transitions — from one continent to another, from life as a potter to life as a teacher, from kilns that were lit with matches to an industrial-strength battery of electronically operated furnaces — and who was secretly petrified by the prospect, this week of visits was a lifesaver. I vowed at the time that if ever I ever was in a position to help other artists, I would.

We left England by boat from Liverpool docks on the Canadian Pacific liner The Empress of Canada, one of the most elegant liners of the time. We came by boat as it was a special low fare for emigrant families and also allowed a good amount of hold space so that we could bring studio equipment, materials, household effects and furniture. The journey was supposed to be a holiday! We'd been told that the boat had a nursery where we could leave our kids in care of staff. It turned out that the "staff" was only one older woman who had at least two dozen babes-in-arms to look after, so we didn't get the rest break that we were hoping for. Although we ate ourselves silly for five days, most of it didn't stay down long, as the Atlantic Ocean was in one of its rougher moods. Taking turns on kid-watch duty, Sue and I were sea-sickly, nervous wrecks at the end of the five-day crossing.



The Empress of Canada, Canadian Pacific Lines.



CHAPTER 2

ARRIVAL IN THE NEW WORLD



On June 27, 1968, we disembarked at Quebec City to become official landed immigrants. I don't suppose it was the first time that Canada's customs and immigration staff had seen seasickgreen people!

After processing, we continued by boat down the St. Lawrence River to Montreal, and then by train to Toronto, where we were met by family members to become new North Americans. We celebrated the national Canada Day holiday on July 1, and the following day, I started as a student of pedagogy in a summer school of teacher training at the University of Toronto.



Central Technical School classroom, 1968.

In the 100-degree Fahrenheit heat and 100 percent humidity, I began to question my sanity. Was there something I hadn't researched? I have a total dislike of

combined heat and humidity where I can't properly function! Fortunately, the heat wave didn't last too long, and I eventually learned to live with the extremes of the Ontario climate, but I never enjoyed them.

At least I had temporarily pared down my multiple activities to one: teacher in training. I fought against the requirement for two eightweek periods of teacher training, giving up two summers in a row, stuck on the top floor of old college buildings with no air conditioning. I felt that five years of post-secondary education along with eight years of practical experience should be enough! Fortunately, I lost that fight, and I greatly improved my teaching capabilities as a result. Sometimes not getting what you want is a wonderful stroke of luck!



Central Technical School open house demonstration for children.



First Toronto Exhibition, 1970. Too many pots, stoneware and porcelain.

I started teaching in the fall semester, and soon that job was increased to two

when we purchased a small, terraced house across the street from my classroom at 223 Borden St. in Toronto. After doing some house renovations, I built a rickety studio in the pipe-strangled basement of the house using the crates in which the furniture had been shipped. I had brought most of my equipment from England, so the downtime wasn't too lengthy. I could now start to arrange a small studio space and work with new materials to develop new glazes and get into production.

I soon became a member of the Canadian Guild of Potters, the Canadian Guild of Crafts Ontario and the Ontario Craft Foundation. The first two organizations were responsible for most of the fine craft visibility during the Montreal Expo '67, with exhibitions in Toronto and Montreal. I offered my services to the boards of crafts organizations as a way to quickly meet people, absorb the state of the craft industry and feel the pulse of my newly adopted country. Due to another unexpected gift from the heavens, within six months of arriving in Toronto, I had work in 35 sales outlets across the country!

A new organization, the Ontario Craft Foundation, had just been set up to coordinate crafts activities and develop a marketing wing to help Ontario artists find outlets for their work across the country. The group took a major booth at the Toronto Gift Show to put all of the craft work in front of a potentially huge buying public. Unfortunately, there hadn't been a survey to find the number of production-based artists and craftsmen who could come up with the goods, should there be buyers! There were plenty of buyers, but sellers were a comparative rarity. Because there had been so little response from other would-be producers, I had the major space, rather like a one-person show with a huge opening-night crowd. The net result was that I quickly had wholesale buyers for my work from one side of Canada to the other. I also had a full-time teaching job! Meanwhile, Sue looked after the family, took some courses in jewelry making, glazed pots all evening for me to decorate and ran the business aspect of the pottery. Our third child, Jonathan Carl, was born in 1970. It was another time of transition!



“Pitcher,” 1975. Stoneware, tenmoku with rutile and iron brushwork, cone 10, reduction.



“Casserole,” 1975. Stoneware, moss green glaze with rutile over iron brushwork, cone 10, reduction.



“Teapot,” 1976. Porcelain, rutile blue-gray glaze over “pineapple” fluting, cone 10, reduction.



“Five-Gallon Wine Jar and Cups,” 1975. Stoneware with oatmeal glaze with rutile glaze poured over, cone 10 reduction.



“Rum Pot,” 1972. Porcelain with tenmoku glaze, iron brushwork and white trail glaze, reduction fired at cone 10.



“Teapot with Cane Handle,” 1976. Combed slip-decorated porcelain, rutile glaze over iron slip, reduction fired at cone 10.



“Fluted Teapot with Cane Handle,” 1974. Porcelain, cylindrical form, tenmoku glaze, reduction fired at cone 10.



“Lidded Jar with Bird,” 1972. Stoneware with wax resist, oatmeal and blue matte glazes, reduction fired at cone 10.



“Hemispherical Teapot,” 1977. Porcelain, white matte glaze with bluegray glaze over, dry granular rutile and ilmenite shaken over wet glaze, reduction fired at cone 10.



“Lidded Jar with Bird,” 1972. Stoneware with wax resist, oatmeal and blue matte glazes, reduction fired at cone 10.



“Two Vases,” 1975. Slip cast porcelain, tenmoku glaze with iron and rutile decoration, reduction fired at cone 10.

My diverse experiences and observations served to give me a good grounding for starting a pottery business in a new country. From the theater and travel worlds, I brought marketing experience. I had several years of my own English studio development, both making and selling theater props and pots. And, there were my

earlier observations on just how a business works from the family grocery business. I was very aware of the value of promotion, visibility and the need to develop a high-quality, reliable product.

Lucky for me, my experience helped enormously, because that was exactly what I had been working on for the previous three years. If one wanted to work for another potter as a thrower in England, there was a certain efficiency level that was expected. I had learned speed-throwing in order to stay alive in market competition with larger studios. The average hourly requirement from a thrower might be 30 to 35 mug forms or 35 to 45 dinner plates per hour, and other forms at similar speeds would be the standard norm. I had worked with fast-production throwers who worked on piecework — the more you threw, the more income you made! Fast throwing was done without compromising the quality of work being made. It made use of a great energy that added much aesthetic strength to the work being done. I was able to work like a fiend and produce a range of quality work that received positive response.

Although my start in Canada had, to me, been surprisingly auspicious, after two years of teaching at Central Tech and living downtown in a huge urban metropolis, we started to think of moving back to country life and setting up a larger studio. I was offered a position teaching ceramics and three-dimensional design in a new community college, Georgian College in Barrie. When I went back to Central after my successful interview, I told my students that I would be leaving at the end of the school year. Within 24 hours, six of them said that they wanted to stay working with me! They asked about the possibility of moving with me to carry on their studies. I called the administration at Georgian College and asked about starting a program designed to give students the skills necessary for self-employment. As the fledgling college was interested in new programs, and the arts and crafts were seen as “hot” areas at the time, they gave me the go-ahead to start to develop a new program.

Once the teaching contract was signed, Sue and I spent weekends looking for suitable property with a family house and land to build a studio. We found an old, Victorian “gingerbread” Presbyterian church manse on an acre in the nearby village of Hillsdale, about 15 miles north of the college, which we purchased and renovated. We built a studio next to the house, and soon, we were ready to be productive again. The garage became our showroom. We were just over an hour-and-a-half drive north of Toronto on the way to ski country and cottage country.



Hillsdale House, 1970. Photo by Robin Hopper.



Hillsdale Studio, 1973.



Hillsdale Studio, kiln room, 1973.



Hillsdale Studio, work in progress, 1975.

Several more students joined the program, which I had designed along the lines of a similar program in studio pottery at Harrow School of Art in England. It included a range of practical studio activities, from life drawing and color theory to clay work, with the mandatory academic portion filled by history of ceramics and ceramic chemistry, two of my particular passions.

Since this program was a late addition to the full course listings, and most of the available funds for the year had been used up by other programs, our first year was a chaotic one completed in far less-than-adequate temporary facilities. However, it was an objective lesson on how to work with less-than-perfect conditions and extemporize. We did a great deal of fieldwork in raw materials studies, as well as historical research on local pottery of the Huron and Iroquois nations, as well as research in the Royal Ontario Museum.

New studios were designed and constructed, and by the beginning of the second year we had a well-equipped department. The views from the classrooms were of fields rather than buildings. A second instructor, Roman Bartkiw, was hired for ceramics and glass. In conjunction with other visual arts faculty members who tailored their courses to fit with ours, we built a vibrant, pragmatic program. Thirty-three years later, a good percentage of the students who passed through the program during the years of my short tenure are still active in the field as self-employed artists, teachers or technicians. It had been a huge learning experience for all of us. We had a number of kilns going full out to accommodate the needs of all.

After two-and-a-half years of combined studio work and teaching, I was feeling drained of energy by my Jekyll-and-Hyde existence. I loved teaching and the students, but the “administrivia” that went with it left me both frustrated and somewhat exhausted. I had a large exhibition of my work at the Canadian Guild of Potters’ Gallery in Toronto, and the overnight success of this sell-out show gave me the courage to leave the regular teaching world and devote my full energies to studio work.

The next day, I gave my notice to resign at the end of the semester. It was a cathartic moment that opened up an uncharted but potentially exciting future! By quitting teaching, I would gain 30 hours per week. My studio income was equal to my teaching income, so I knew that the kids wouldn’t starve or have to go barefoot to school! Once again, I was truly my own boss, doing what I really wanted to do. I set about developing a full range of functional pottery, including dinnerware, tea ware, three sizes of mugs, goblets, chalices, creamers and sugar bowls, decanters, pitchers, several varieties of casseroles and serving vessels, bowls of various sizes, wine jars and rum pots. In addition to the functional range, I continued to explore different directions in one-of-a-kind pieces with ideas stemming from historical prototypes and decoration processes, shells, bird forms, zoomorphism, geology and the landscape of Canada. It was a period of intense personal growth.



“Bird,” finishing slip trailing.

With the help of Manpower Canada grants, I took on a number of assistants and apprentices, both former students and others, to help in volume production and to keep up with demand for our work. The largest number of assistants at any single time was six; we produced a wide range of work, primarily functional, that continued to be sold across the country.

As a result of the public and collector response to what I was doing, I was particularly interested in developing new directions in one-of-a-kind work, and the assistants gave me some freedom from the production work required to satisfy all of our business and private clients. I still made all of the bigger work and decorated the regular range of functional work made by my assistants.



“Bird”, starting slip trailing.



Studio at 'Chosin Pottery, bisque-fired birds.



Brushwork Design. Abstract of hummingbird in flight.

I only trained one assistant, Sheila Falle, to do the decorative brushwork that was a feature of the line, as I felt this would be a particularly difficult habit to break when the assistants left my studio to set up ones of their own. After Sheila moved away from the area and I was becoming swamped yet again, Sue suggested that I train her in brushwork procedures, and she took over much of this part of the production work for several years. She later decided to take a full apprenticeship in the studio to learn the whole production process thoroughly. During this time, I developed relationships with galleries from coast to coast that were more interested in the one-of-a-kind works that I wanted to make. I generally had three

one-person shows per year, set up at approximately four-month intervals. In between, I worked on production work and taught occasional workshops. This pattern of life and work continued for several years, with a certain revolving-door aspect as assistants moved on to start their own studios and were replaced by others.

My involvement with organizations continued to grow. One developed into Ontario's first Artist's Studio Tour program through the Theater Guild of Georgian College. I later started another organization called the Craft Collaborative. This was designed as an exhibiting group of Master Craft Artists in various media. Part of the objective was to show the best of what work was being done in Ontario at the time in ceramics, glass, fiber, metals and wood. Its membership was largely made up of the top echelon of more visible instructors from the colleges.

The Craft Collaborative also gave a push to the Ontario Craft Council to be leaders to represent the best. The OCC was a long-standing organization that mainly looked after the needs of amateurs. Much as that was laudable, no one was looking after the needs of professional artists newly emerged from colleges or even those who were highly experienced. The push from behind by the Craft Collaborative seemed to have the desired effect, and the OCC grew into a much more professional entity, which, in turn, had a positive and strengthening effect on amateurs in terms of their aspirations.



Roman Bartkiw, "Globe-Form Vase," 1976. Colored porcelain with granular manganese inclusions, oxidized at cone 8.

MEMBERS OF THE CRAFT COLLABORATIVE 1976



Rex Lingwood, "Bowl," 2004. Cuir bouilli, cowhide.



A. Alan Perkins, "Chalice," 1995. Gold with overglaze enamel. Courtesy of the Canadian Clay and Glass Gallery.



Jane Dams, "Salmon Forest Bark", detail, 2004. Embroidered hanging including machine embroidery on cotton, silk and rayon; background is discharged print using collagraph plates.



Andrew Goss, "Three Boat Pendants," 2005. Concrete, pigment, gold leaf and silver leaf, sterling chain.



Paul Epp, "Verterre," 1981, white pine and paint. Height: 12 feet; length: 40 feet; weight: 5 tons. Photo by Paul Epp.



Marie Aiken-Barnes, "Stitchery Panel," 1982, Courthouse, Barrie, Ontario, Canada. Photo by Peter Christopher



Sandra Noble Goss, "Fossils Framed Brooch," 2004. Etched brass, 18 karat gold, white gold and copper.



John Nickerson, "Hinged-Lid Ritual Vessel," 2004. Glass and stainless steel. Photo by Steve Mann.



Michael Fortune, "EBoyy Chairs," 2004. EBoyy. With stainless steel inlay. Photo by Michael Fortune.



Donald A. Stuart, "Entre Amis – East/West," 2004. Lariat necklace, gold, beach pebbles and steel inlays.



Stephen Harris, "Rocking Chair," 1975. Benge. Photo by Pete Patterson.



Roger Kerslake, "Vase," 1997. Hand-built stoneware with rubbed oxides, Reduction fired at cone 10. Photo by Roger Kerslake.



Robin Hopper, "Homage to Adolph Gottlieb." Porcelain bottle. Size: 20" high.

CHAPTER 3

GO WEST, YOUNG MAN



In 1975, The House of Ceramics in Vancouver, British Columbia, Canada, was scheduled to have an exhibit of my work. We decided to take a few extra days and make a holiday of this large exhibition and two-day workshop.

One of our assistants, a graduate of the Vancouver College of Art, had warned that we would fall in love with the city. Vancouver is certainly a big, beautiful city, but we wanted to get away from big! We weren't excited about the rainy mainland, but halfway through a 90-minute ferry ride from Tsawwassen to Swartz Bay on Vancouver Island, we passed through Active Pass and into a magic realm of wooded, rocky islands called the Gulf Islands. With the nostalgic smells of the ocean and the quality of light from atmospheric



“Rocky Mountains,” landscape drawing.



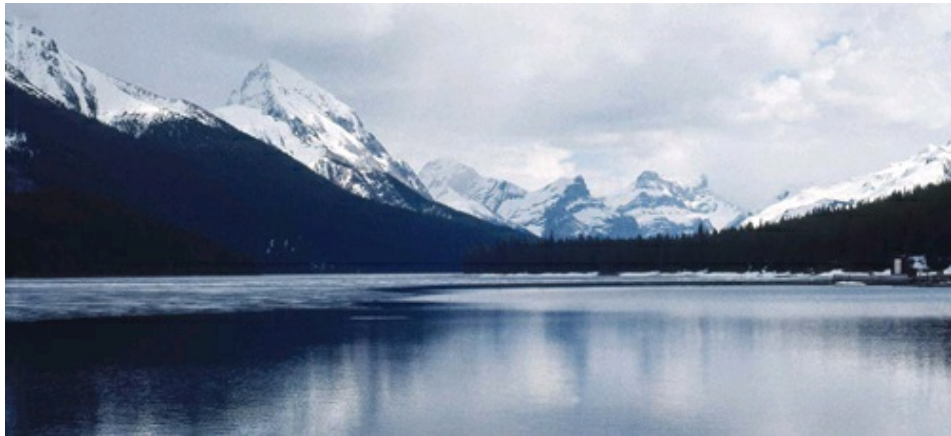
"Metchosin Mists," 1978. Porcelain plate, multiple glaze application, reduction fired at cone 9. Size: 16" x 16".



Malahat Mists. Photo by Gary Woodburn.



East Sooke Park. Photo by Gary Woodburn.



Lake Louise, Alberta, Canada. Photo by Robin Hopper.

A FIVE-YEAR PLAN

We decided to set up a five-year plan to move west and make southern Vancouver Island home for the rest of our time on earth. After another year of intolerable winter and summer weather, we revised plans to ASAP! We started to look seriously at property in the area we wished to make home. We knew there was much at risk, but we also knew that staying where we were was not an option. I envisioned ending my days in a blizzard on Highway 400, a fast, dangerous road prone to sudden, dense whiteouts, on my way to or from a meeting of some sort in Toronto. I started to feel paranoid and couldn't get out fast enough.

Looking at real estate in another province nearly 4,000 miles away was a challenge, to say the least. Most people thought that we were crazy to even consider making the move in the first place. Why would one make a move to the other side of the country because of weather? It wasn't just weather! It was primarily the potential opportunity, perhaps indulgence, to build a beautiful garden environment that was in mind, as southern Vancouver Island has the best climate in North America for growing the widest variety of plants. I had been a garden lover since my late teens, when my interest was kindled by studying in an old mansion set in a park. I started to learn about gardening from Sue and her mother when we bought our first property. I was now 38 and wanted to get on with the expected life-long garden project. Everywhere that we had lived we built a garden, but we never stayed long enough to see them mature. This time it would be different!

Careful planning was essential, as it was unlikely we would have a teaching possibility to fall back on. Since I had been selling my work through galleries nationwide for nearly 10 years, I knew that I could rely on that source of income. What wasn't quite so certain was the "down-time" between closing one studio and opening the next. Always the optimist with a tightly focused mind, I put the power of positive thought into action.

I like to think it was this power that brought on the next serendipitous event in our lives. I was working in our gallery one afternoon in August 1976, and a family came in from Toronto. It turned out that the wife had purchased quite a lot of my work in Toronto galleries, but she had never been to our studio and gallery. During their visit, the family talked about Vancouver Island and Victoria. In the course of conversation, I told them that we were planning to move to that area, but we had just lost a piece of property we were thinking of buying. The husband, a well-known lawyer, replied that he had a cousin out there who had a small farm he was thinking of selling. Bingo! With soft lights flashing in my head, we talked about it. As they left, I said that I would be very interested if they could give me further information.

THE PERFECT PROPERTY

Normally, after a conversation is over, that is the last one hears. Not this time! About three days later, I received a letter that gave more details about the property and the name, address and telephone number of the owner. A great believer in synchronicity and serendipity, I called up the owner, told him the story and asked whether he was in fact planning to sell. He told me that he had just put down the phone from talking to a real estate agent who was shortly coming out to appraise

and list it. I suggested that he have it appraised but not to list it right away, and I would get local friends to look at it and call me back. My friends felt that it was a good “handyman’s special” that needed a lot of work, but as I had done many renovations in the past, this one should be just fine. These friends called another mutual friend, a local real estate agent, who looked at the property, assessed other properties that had sold in the area and compared prices. He called me in Ontario and said that while it needed considerable work, it certainly had potential and the price was right. I called the owner back and told him I would be out next morning.

As I had been duly warned, the house and property were certainly in dire need of work! Part of the grounds were chest high in stinging nettles, but I knew that to be a sign of really fertile acidic soil conditions — a big plus! It was in the middle of a small rural community and close to beautiful beach and lagoon area. The owner showed me around the area with its craggy, coastal beauty, its lakes and trees and its many parks. I was quickly hooked. I phoned Sue to come out that day, as I felt certain that this was the place we were looking for, but she needed to see for herself. The next day — just five days since the couple from Toronto came for a studio visit — we arranged financing through a bridging loan and bought a decrepit farmhouse on nearly 6 acres, a 10-minute walk from the beach and a 25-minute drive from the city center. It was the village of Metchosin, an old Indian name meaning “the place of stinking fish!”

We started planning seriously at this point. When assistants felt comfortable about moving out on their own, we didn’t replace them. We put the Ontario property up for sale and looked for a buyer. It isn’t easy to sell specialized property with a house, large studio, gallery and garden. It’s perfect for a pottery or art studio, but most artists hadn’t the money it was valued at. We had it on the market with no movement for nine months. Although the Metchosin property was rented to a group of hippies to keep it warm, dry and protected from vandalism, the bridging loan was costing us nearly \$1,000 per month. We almost had to put the property on the market again and cut our losses. Good luck and serendipity stepped in once again in a miraculous way.

Faculty and students from the ceramics department of one of the other professional level community college programs made an organized visit to see how a working studio operated. I showed them around, told them how the studio worked and who was responsible for what. Some asked about the sale sign on the property. I told them that we were planning to move west and that it was up for sale, complete with kilns if wanted. It would be a great buy for a work-obsessed student or two! There was a lot of laughter, and the group left.

A couple of days later, I was sitting in the studio, decorating teapots for the next firing, when two of the students came for a return visit. I thought they might be looking for an apprenticeship or other jobs. When they said they wanted to talk about buying the place, I nearly fell off my stool in stunned silence. It turned out that they had talked to their respective parents, and the parents were willing to finance the place for them. I had almost given up hope! I invited them into the house to talk business. The outcome was an offer to purchase that was somewhat lower than our lowest price, but we wanted out, and they wanted in. They were just finishing school and needed to conserve money. I could appreciate their position. We had a reasonably solid, 10-year, reputation with many clients across the country. Although we would soon be devoid of a studio, I had enough time to make a good stock of work for a final exhibition and sale.

So we made a fair deal, with completion of sale scheduled in three months. One month was for making pots. The second month was for working on renovation of the new studio building in British Columbia while the pots dried and were bisque-fired. The first two weeks of the third month were spent glazing, decorating and firing, culminating with a big final exhibition and sale. The sale was amazing, with huge numbers of people responding to a pagelong article in the Toronto Star, Canada's largest newspaper, that told the story of our imminent departure to the west. The paper had never done anything on the fact that we had been there, but somehow, pulling up stakes was newsworthy. We sold everything in the gallery with the exception of a couple of small spice jars, as people queued up with arms full of pots, like we had died the day before. The net result was an empty gallery and a larger-than-expected amount of cash in the bank to soften the arrival at our new home.

The final two weeks were spent packing boxes and crates to get ready for the move. At the time, it was possible to move businesses across country by rail through a piggyback system. I had read about it in the newspaper in a story about a family moving from their farm in the West to relocate to another farm in the East. They had built a small, family apartment into a 45-foot-long trailer, with space for equipment and animals in the rear of the trailer. It sounded like a terrific opportunity, possibly turning an extremely expensive move into something very efficient and reasonable in cost. The following week, a 45-foot-long Canadian National Railways trailer was parked in our driveway, ready for us to pack it. I had a lot of experience in packing scenery trucks in my theater days, and I knew exactly how to go about it. I drew a floor plan of the trailer and measured all of the furniture to see where it would fit. The front part of the trailer was furniture and

household effects. In the center, we built a wall of boxes of soft, insulating firebricks. These were for the kilns that I would build as soon as possible in the new studio. They acted as a great divider so that all of the studio equipment could be put in the rear half of the trailer. With help from a group of friends and students, we packed the trailer according to the floor plan, and it worked out perfectly. The day after it was packed and sealed, the Canadian National truck came, hooked up the trailer, drove out of the driveway and headed to Toronto to place the trailer on a flatbed train car for its journey west, where it was scheduled to arrive 10 days later. After our first night in a camper trailer in the driveway, we closed up the house, put the family and pets in the car and drove away on the first leg of an eight-day expedition across the country. We were on the road again. The choreography of life was recharged with a new enthusiasm and energy.

A MAJESTIC COUNTRY DRIVE

Until one drives across Canada, one has no real concept of the vastness and majesty of the country. We drove hard on some days where the scenery wasn't too inspiring to leave more time for the last few days of driving through the exquisite mountain regions and on to the coast. Throughout my life, I have always carried small sketchbooks with me to jot down images of things that I found visually exciting — landscapes and details, colors and forms. They are not great — or even good — drawings, merely mind joggers for future reference. I did this on our trip across Canada. Through my extensive research and teaching in the areas of glaze and color development, I had developed an unusual skill in understanding and memorizing the behavior of ceramic materials; I could look at the color of just about anything and write down a glaze recipe fairly close to that particular color. It works by a process of elimination based on what materials enhance or inhibit the development of specific colors. This strange mind-set was very useful to me to depict the landscape through ceramic means. (I will explain it further in Chapters 5 and 8.) The recipes would need some testing later, but the results were usually very close to what had initially been observed. Throughout the journey, I made cryptic notes and drawings, in preparation for who knows what!

After eight days of driving, we arrived at the coast. One small piece of water and a further three-quarters of an hour of road driving remained between us and what was to become our new home. The group of hippies to whom we had rented were still entrenched, and the place was a real mess. Getting them to leave was likely to be a problem, because renters generally had the law on their side, and landlords' eviction notices were greatly frowned on, even when perfectly legal. As

I toured around the locked house, looking in through the windows, I noticed an eerie blue glow from plant propagation lights. They had a small marijuana grow operation going full blast! When they returned later that afternoon, I confronted them, and told them that if they weren't out by the next morning, I would report them to the police. It could have been an ugly scene, but when they offered me marijuana cookies, I realized they were friendly. The next morning, I went to the property. It was clean as a whistle. With no sign of the offending plants and paraphernalia, furniture or personal effects. We were now able to move into the newly renovated studio on a temporary basis, so I called CN, and the truck with all our possessions came out the next day.

MAKING OURSELVES AT HOME

A bunch of friends helped us to efficiently empty the truck, and we had a great potluck arrival party. We provided the beer, and the friends provided the food. It was the beginning of June, still cool in the evenings, but before long we had a fire pit built and a celebratory bonfire going. A large, antique, Quebec refectory table was the groaning board for the food, and it was adorned with rustic multibranched candlesticks. It was a wonderful, festive end to an arduous journey and the start of a new life in a new part of the country. We were all exhausted, but fired with enthusiasm at the same time.

The next day, we started to demolish parts of the house that were not going to be part of the renovation. A couple of days later the phone rang. It was the editor of the Times-Colonist newspaper, the main regional print media. He had the clipping from the Toronto Star on our move and wanted to do an article on our arrival! I told him that we had major work to do before we would be ready to open, and I estimated that it would take about four months. I asked if it might be possible to call him when we were ready, as we certainly would like any publicity that might be offered. He agreed to this proposal, and set a tentative date for callback. I had always been lucky getting media attention, and this opportunity was certainly not to be missed.

During the month that I had spent on the property earlier to renovate the old horse barn to become the new studio, I had a good period of time to design renovations for the house. I did the drawings and got the necessary permits for the house and kiln building. I also got the name of a reliable contractor and arranged for him to start work on July 1, the time I expected to have finished the necessary preparation work. He thought that we should bulldoze the whole thing and start again from scratch! In retrospect, he was probably right, but I always have tried to

save heritage in any of the previous houses that I had renovated to develop an interesting living space. So, we decided what had to be done, and I started taking down walls and doing other work until it was ready to start rebuilding. The kids continued to live in the trailer for the summer, while Sue and I camped in the house. In case anyone had difficulty visualizing the completed renovations, I brought my theater designs skills into use again and did a series of drawings from imagination of what the renovation would look like from any given point in the space. The house, studio and gardens all have elements of theatre about them, part of my built-in design concepts.



Truck unloading party. Photo by Robin Hopper.



Truck unloading party. Photo by Robin Hopper.



Front of house before landscaping. Photo by Robin Hopper.



Exterior of house during renovations, 1977. Photo by Robin Hopper.

It was a testy period, to say the least! We needed to raise the old house and build a foundation, as it had been built on rocks that had, in 75 years, slowly sunk into the ground and left the wooden house sitting on earth to gradually rot away. We had to remove the fireplaces and chimneys, as they probably would have pulled the floor structure. Being in the country, we had rats running through the exposed house, jumping in through holes in the floor and walls. Fortunately, it was a warm, dry summer, and we didn't have rain to add to our problems! The demolition part of the project was done on time, and the renovation started in full swing. In a matter of days, there was a new foundation, and the old house was lowered and attached. We could finally cover the holes in the floor and keep the rats out. Things were definitely on the upswing!



“Dining Room,” 1977, drawing.



Dining room. Photo by Robin Hopper.

GETTING DOWN TO BUSINESS

While the carpenters, plumbers and electricians worked on the house, I worked in the studio, building the propane-fired kilns, a 60-cubic-foot and a 30-cubic-foot downdraft. I had designed the kilns in Ontario and purchased all of the bricks there. Once the kilns were functional, I could start making studio furniture and get into production. I have always preferred to be in control of my own clay. Before I left Ontario, I developed clay bodies and glazes from materials available in British Columbia. I purchased a clay mixer, 10,000 pounds of the necessary materials and got to work. I never have thought small and always thought positive — to the point that failure was never an option, because I had never thought of its possibility!

After mixing and pugging 5,000 pounds of clay, it was time to start making pots. It had been a break of five months, and it felt good to be back in producing mode again, using a different set of muscles. A 500-square-foot gallery needs many and varied pots to look inviting to a customer. I made a combination of both functional and one-of-a-kind work along the lines of what I had been doing in Ontario for nine years.

Oct. 21 had been a target date for things to open up, and we were ready. But would people come? I called the editor at the local newspaper to see if he remembered our earlier discussion. He did! He arranged an interview with a reporter and photographer two weeks before our scheduled opening. The result was a terrific, full-page spread. This was picked up by two other local community newspapers who wanted to do articles, plus two TV companies, who wanted to do live shows with me and my potter's wheel! My way-back theater training had come full circle! We had total media coverage at no cost, and more than 2,000 people came out the first weekend we opened — a considerable number for an art gallery opening. It was a heady time. I guess that it wasn't every day that an artist with a reasonable reputation in Ontario would up and move to somewhat sleepy Vancouver Island, Canada's farthest western extremity. Although I couldn't claim responsibility for it, we accepted our incredible good luck with great thanks. I had estimated that we would have to send work to galleries across the country for at least two years before we could break even locally. The amazing media blitz rendered that unnecessary, and the gallery was successful from day one. Our biggest job now was keeping up with demand, not creating it.



Interior of studio, with Robin Hopper glazing a plate.



Casseroles drying outside in the garden. Photo by Robin Hopper.

AN UNEXPECTED HONOR

A few days later, we received a milestone telephone call. Earlier in the year,

March, I think it was, I had been nominated for a new, major award for my work in both teaching and producing in the craft field. The nominators were Ann Mortimer from Ontario and Walter Dexter from British Columbia, both prominent artists in the ceramics field. The support material was sent off, and that was all I needed to do, except wait. During the action-packed six months that followed, I had totally forgotten the nomination. When Orland Larsen, president of the Canadian Crafts Council, called, I had no idea what was about to happen. The CCC was the administrator of The Saidye Bronfman Award for Excellence in the Crafts. The Bronfman Award was started by a private foundation in order to recognize living artists working in fine crafts, in much the same way as The Living National Treasure designation does in Japan. There would be one award per year, selected from across all craft media. Mr. Larsen was calling to inform me that I had just been named as the first recipient of this award. At the time, I didn't remember what this award was, so I was incredulous to have been selected for it. At 38, I felt far too young for such a prestigious award and honor, but I accepted it anyway. The cash award was particularly welcome, as our money had been severely thinned by the previous six months' activities, and we still hadn't finished the roof! I was later told who some of the other nominees were, and I was amazed. Any one of them should have had it.

The call came when I was in Halifax, on the East Coast, attending to the affairs and funeral of my brother, John, who had died just three days earlier. The combination of absolute devastation by the unexpected death of a much-loved brother and the total elation of receiving news two hours after the funeral that I was to become the first recipient of Canada's highest annual award in the crafts was almost more than I could bear. I broke down and wept on both accounts. Each year since, whenever the new Bronfman Award recipient is named, my thoughts go back to that day and the incredible range of emotions that went with it.

The presentation of the award was to be made in Montreal in early December. Conveniently, I had a one-man show due to open the night before in Toronto at the new Ontario Crafts Council Gallery. Sue and I flew in to Toronto for the opening. After an insanely hectic day, we went straight to our downtown hotel. The next morning, we were scheduled for an early flight. I opened the hotel curtains in the morning to find a white world! Toronto was in the middle of a major blizzard, and there was little likelihood of flights going anywhere that day. I quickly phoned the rail company and reserved the last two seats on the train bound for Montreal. Unprepared for winter weather conditions, we dragged our bags for eight blocks through knee-deep snow to the railroad station. The journey took almost twice as

long as scheduled, and after nearly six hours, we realized that we were coming into the Western suburbs of Montreal. It was already 4 p.m. and the high-visibility reception with Canadian government officials, Bronfman family representatives and the executive of the Canadian Crafts Council was due to start at 5:30 p.m. We changed into our posh clothes in the swaying train washrooms, emerging like new butterflies from cocoons, just in time for the train to pull in at the station. There, we were met with a limo and executives from the CCC and the Bronfman Foundation. We were rushed — as much as one can rush in a snowstorm — to the reception center, where we arrived about 5 minutes before the proceedings were due to start. We were already exhausted, but the night was just beginning! At 7 p.m., there was a dinner reception in my honor at Mrs. Bronfman's house. It was like an exquisite, small, eclectic museum, with many objets d'art that I recognized from illustrations in books. It was Mrs. Bronfman's 80th birthday, and she was sitting at the far end of the music room on a long chesterfield in front of an elegant combination of Brancusi sculptures, Vlaminck, Rouault and Derain paintings and early Tang dynasty Chinese ceramics. My eyes darted everywhere and fell on collections of jade, Blanc-de-Chine and perhaps the most beautiful: a pairing of a small Monet painting of waterlilies with two 10th century, turquoise-colored Islamic vases. I was introduced to Mrs. Bronfman and apologized for being distracted by the artwork in her home. She called over her daughter, Phyllis, to take me on a tour of the rest of the house.



Sue Hopper, Joan Chalmers (Canadian Crafts Council representative) and Robin Hopper at the first Bronfman Award Presentation, 1977.

The dinner was sublime, and the wine selection more so! At the time the Bronfman family owned most of the world's best vineyards under the Seagram's

name. After a wonderful evening, we went back to the hotel through more snow. In true theatrical fashion, one of the most memorable days of my life was like a comedy of errors, vacillating from chaos to insanity but somehow under a modicum of control. When I returned home, I sent Mrs. Bronfman a piece of my work as a token of appreciation. I received a telegram from her later thanking me and saying that she had put my bowl between two drawings by Rodin. “I thought it would like the company,” she said!

I was recently asked what the Bronfman award had done for me. I answered that the peer recognition gave me a great sense of confidence, license to take more artistic risks and it gave this particular Robin the wings to really fly. It has now been 30 years and I haven’t come down yet.

BACK TO THE REAL WORLD

Getting back to the real world was tough after such a heady experience. The Bronfman Award came with the requirement that I produce an exhibition by the following year to open at about the same time as the award was given. I already had three one-man shows booked for that year, but this one was to be very different from the single center commercial gallery! It would go to 19 public art galleries from coast to coast over three years. Many of the galleries on the tour had previously shunned fine craft, so this opened up new opportunities with a vengeance. I decided to expand on previous one-of-a-kind work and focus on the landscape of Canada using the cryptic drawings and technical notes done on our cross-country journey.

The exhibition was titled *Explorations Within a Landscape*. The work fell into several different groups. The main one was painterly landscape in content, with multiple glaze applications over simple geometric forms. Other pieces explored concepts of geology, utilizing a variety of traditional and nontraditional colored-clay processes. Natural history in the form of shells and plant form also had their place. I wasn’t trying to “say” anything with the work, just explore the medium, its technology and its historical associations as part of an ongoing personal research into a highly complex medium. Most of this research was in the area of glaze and color development through intense materials study. The exhibition opened in late October 1978 at the Art Gallery of Greater Victoria — another important milestone in my life!

A RELUCTANT LEADER

At about this time, I reluctantly became the first president of the Ceramic Masters Canada, later called Ceramists Canada, which was to be an organization of master ceramists. It was conceived of by a small group of significant artists who hadn't seriously thought of all the pitfalls that were entailed, where the money and energies to make it work would come from and how it might function. Most of the clay fraternity across the country was dissatisfied with the objectives of the new organization that had displaced the aging Canadian Guild of Potters. When it seemed moribund, I was asked if I could step in and make it go. I tried, but it was an uphill battle from day one. Since there was no travel budget, I also became the British Columbia representative to the Canadian Crafts Council, which had at least one meeting per year in Ottawa, where my travel costs were covered, allowing me to do double duty with Ceramists Canada. It meant a double organizational workload, but as far as I could see, it was the only possible way to make it work. My term was for two years, during which we had several good meetings and saw a number of positive things develop, including the seed ideas for founding the Canadian Clay and Glass Gallery in Waterloo, Ontario, Canada.

I handed over the reins of power to Ann Roberts of Ontario, who did a superlative job of furthering direction, particularly with reference to the development of a beautiful architect-designed gallery for contemporary ceramics and glass. However, after two more changes of leadership, the problems that I had foreseen — apathy, limited membership numbers, lack of funds and the perception of elitism — led to the final collapse of the organization in 1986. The Canadian Clay and Glass Gallery continues to show major Canadian and International exhibits.

Organizations have been a major part of my life, and I have started several. All had some effect; some had and still have great effect, and others perished by the roadside, casualties of changing needs, times and lack of momentum. I have been a fair “ideas person” and a reasonably good starter of things, but unless there have been solid assistants working with me, I have lacked time and patience. If things don't go as well or as quickly as I feel reasonable, my patience has a short lifespan; I tend to lose interest and look toward other excitements. Democratic organizations usually move sluggishly, and dictatorship, even if benevolent, is usually frowned upon! However, without ideas, organizations and volunteers to make ideas work, nothing of much significance would be achieved. For me, making things happen and expanding knowledge are two of the most significant and exciting aspects of life in the arts.



Canadian Clay and Glass Gallery, Waterloo, Ontario, Canada; John and Pat Patkau. Photo courtesy of Patkau Architects.



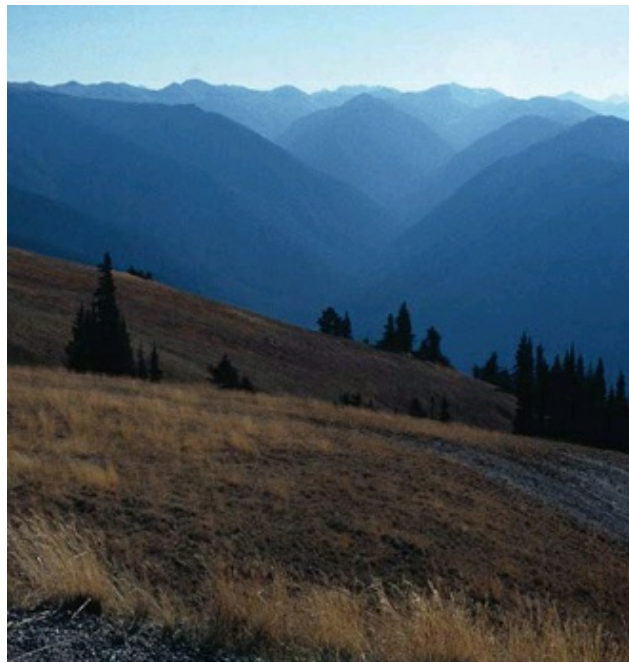
Canadian Clay and Glass Gallery, Waterloo, Ontario, Canada; John and Pat Patkau. Photo courtesy of Patkau Architects.

TRAVELS AND TOURS

In 1981, I was invited to conduct a series of workshops in Australia and New Zealand during a nearly three-month tour. After several years of pushing hard, with

few breaks or holidays, Sue and I were both quite tired and looked forward to a change of pace in a vastly different environment. Although I was contracted for a large number of workshops, they were mainly at the weekends, leaving most weekdays free for traveling and sightseeing.

As Australia is the world's oldest continental formation, and I was a very amateur geologist, I was excited to visit. I found the experience very stimulating and the landscapes of different states visually stunning. I was transfixed by the incredible environments in which we found ourselves. There was the giant underwater garden of Great Barrier Reef, the volcanic plugs of Glass House Mountains of Queensland and the Pinnacles in Western Australia. I would love to have reached the interior and Ayers Rock, but, unfortunately, there wasn't time to fit it in. I also found that the burned, crispy continent gave me a much greater appreciation of geology, the decomposition of hard feldspathic rocks, like granite, and the amazing variety of coloration coming from iron. These observations of nature and mineral degradation added tremendously to my understanding of ceramic glaze and color development.



Blue Mountains, Darling Range, Queensland, Australia. Photo by Robin Hopper.



The Pinnacles, western Australia. Photo by Robin Hopper.

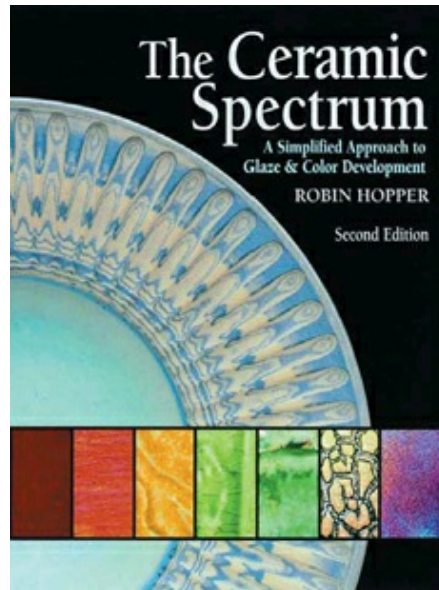
After nearly two months in Australia, we flew to New Zealand for three weeks and more teaching. Although nothing like the Australian continent, New Zealand also has fascinating landscapes, from subtropical in the north part of the north island to subantarctic at the most southern part of the south island. The fascinating geothermal activity and eroded landscape near Rotorua gave me a lot to think about regarding ceramic alchemy. We finished our visit to the Southern Hemisphere with 10 days of rest, relaxation and snorkeling in the Fiji Islands.

During the tour, I was surprised by the number of times people asked me about a series of articles that I had written for the British Ceramic Review magazine in the mid-1970s. After publishing three simplified ceramic technology articles, I had almost zero response from readers. I figured that they must have had no value, and since researching and writing takes an inordinate amount of time, I felt that my time would be better used in the studio. In five years, I received one letter related to the articles. Suddenly, I was on the other side of the world with many people asking why I had stopped writing, since the articles had given a different view of ceramic glaze and color development based on observation instead of calculation processes. They had been using them all the time, but I had no idea, because there was little or no feedback. Much to my surprise, it turned out that the articles were apparently quite innovative in approach.

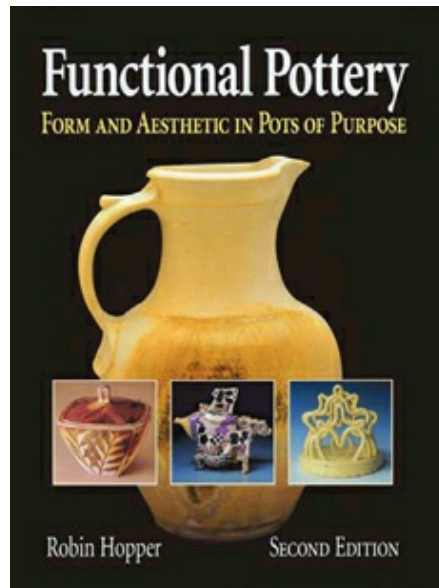
AN AUTHOR IS BORN

When I returned home, among the waiting stack of mail was a letter from Tom Marsh, a potter, educator and finder of new authors and manuscripts for Chilton Book Company, producers of most of the best books in the ceramic field at that time. Tom asked me if I would consider writing a book expanding my articles and dealing particularly with ceramic color development. I had done about 25 years of

personal research in this area, as I had been frustrated by the lack of color information available to the ceramic artist. I had started my art school life in painting and printmaking and wanted to approach the ceramic surface in much the same way as a painter or printmaker dealt with surfaces, imagery and color on canvas, board or paper. I said that I didn't think it would be of much interest, since I had received almost zero response to the articles. He replied that he knew of artists and educators all over the world who were using my articles.



Having no experience writing books, I asked him how it all worked. He told me to send in an outline of what I felt the book should contain, and the company would get back to me on it. He asked how long it would take. I used to feel that a year was a long time, so I replied "If you give me a contract, you will receive the manuscript and all illustration material year from the date of contract." I received the contract, and they received the manuscript a year minus a day later. It was an extremely tight year, since I already had commitments for three exhibitions and work for our own gallery, plus some workshops to boot! My first book took 15 months to get through the publishing house, and it emerged in October 1984 as "The Ceramic Spectrum: A Simplified Approach to Glaze and Color Development".



Halfway through writing “The Ceramic Spectrum,” I started to think of my years in the ceramic education world and the books that I would have loved to have for my students, but they didn’t exist. I wasn’t looking to become a writer. Like so many other things in my life, it just happened; an opportunity presented itself and I went for it. I discovered that I really enjoyed the writing process — something I didn’t know until I tried it. It forced me to be analytical in ways that I hadn’t previously considered, about the whys as well as the hows of things. I put together another outline for a subject dear to my heart and sent it off to my editor. This became my second book, “Functional Pottery: Pots of Purpose,” published by Chilton in 1986.

Very early in the writing of “The Ceramic Spectrum,” I felt the need for some research on early Greek wares, so I went to Greece to see for myself. The experience changed my life, work and direction. The changes later led to the development of a new body of work that became the core of a large exhibition, Explorations on a Classical Theme, for the Burnaby Art Gallery, near Vancouver, and later the Visual Arts Centre in Montreal. The head of ceramics there was Judi Dyelle, a former colleague at Central Tech in Toronto. We rekindled an old friendship and kept in close contact.

CHANGING PATHS

While writing “The Ceramic Spectrum,” I was concentrating on everything except my family. In my myopic or tunnel-vision view of life, I thought that merely being there constituted family life and that all was fine. It was a throwback to my

postwar childhood years, where my parents were both completely involved in the family business. They were there, but only in body, not in spirit. Without realizing it, I was selfishly perpetuating the same on my own family. I was totally immersed in my work, an addict to clay and words. I became severely depressed, which led to complete estrangement and the total breakdown of our marriage. I guess that one could call it a midlife crisis. As far as I can recall, it was my first big failure in life. Sue and I had married far too young, and we were inexperienced in the realities of life. It was an amicable separation and remains that way. I left Sue with the house and business and responsibility for our 13-year-old son, Jon; the girls had already moved out. I moved to Montreal to be with Judi.

I wasn't quite sure how the next phase of my life would go. Judi had a tiny studio in the basement of her house, and I had a small office space where I worked on my second book. I did most of the research and writing for "Functional Pottery" in this office. I was invited to do some teaching in Quebec and to participate in

RETURNING HOME

We renamed the studio 'Chosin Pottery and got to work in a big way. Judi helped me with the smaller items of the functional production range, looked after the business side of things and started developing one-of-a-kind work. After a couple of years, she felt too constricted for time on her own work, and I was buso with too many other things, so we decided to hire an assistant, Arlene Yarnell. She had known Judi in Montreal, and she was now living close to Metchosin. Arlene had had her own studio in Montreal, and with a little re-training, quickly settled into 'Chosin Pottery. At the time of writing, she has been our assistant for 19 years. a symposium in Baie St. Paul, where I started to work with colored terra sigillatas on large tile panels. Income mainly came from doing many workshops in the Eastern Canada and the United States. At the same time, I used some of this mobility to research historical ceramics in museums in New York state, including New York City, Brooklyn, Rochester and Syracuse, as well as museums in Boston, Cleveland, Columbus, Ohio, Philadelphia, Quebec, Montreal, Ottawa and Toronto. I was able to select objects for photographic images in the new book. I like to have good, but not overused, photographs in my books, so this research time was put to very good use.

I had a small amount of time to produce work, and, with the minimal space available to do it, I decided to work mainly on sculptural forms and tile panels with ceramic paintings done from drawings made in and around Montreal during the fall of the year. It gave me considerable opportunity to explore a more painterly

approach using colored terra sigillatas and lowfired glazes. I had one exhibition of this work in Montreal. After about six months of being there, I received a call from Sue saying that she wanted to sell the Metchosin property, as it was too much for her to manage. I agreed to buy her out. Judi and I started to make plans to move back to the West.



Studio sign. Photo by Robin Hopper.

AN UNEXPECTED MUSE

The art scene in Montreal and the province of Quebec was always very vibrant. As a largely Frenchspeaking enclave in predominantly Anglophone North America, the Quebecois greatly value their culture, both past and present. Arts and culture are well supported by the government compared with the rest of Canada. At the time of our move from Quebec to British Columbia, it was like going from balmy to tepid in terms of the government perception of the value of arts and culture in society. After resettling into British Columbia for a few months, it became obvious that a recession was in progress. Negative economic times and government cutbacks quickly slow and reverse growth that may have taken decades to build.

About four months after returning, we realized the sales were borderline at best. While out walking the dog, I had an idea that might stimulate sales. (Dogwalking time is usually the time when my better ideas occur!) Since almost all of the potters in the area were suffering slow sales, I had the idea that we might have a two-day group exhibition, like several small oneperson shows. The work should be new work that the artists were excited about, and each would agree to do an hour of demonstration related to the work. This would inform the visitors about the processes that we do to achieve the finished works and possibly build a clientele educated in the complexities of the ceramic medium. In turn, it might revitalize a sagging arts economy, at least in one small area. Judi and I invited about 20 of the

best regional ceramic artists to a wine and cheese gathering to see how people might relate to the idea of having the show throughout our garden, which is particularly beautiful at the end of May.

There was little to lose and much to gain if the idea was successful. Although sales would be nice, it was public education that was the primary concern. Most of the artists were positive, and so began FIRED UP! – Contemporary Works in Clay, an entity that has now been going strong for 23 years.



FIRED-UP flier montage; Glenys Marshall-Inman.

Around the same time as my dog-walking flash of inspiration for FIRED UP!, I had another one! Through my travels, I noticed that the area of ceramic glaze and color development received little priority or coverage in ceramic educational circles. As a result of my years of research, I felt that I might be able to offer short, intensive courses and started to think of starting a summer school. I was intimidated by the logistics of doing it in our studio, but thought that the wonderful campus at nearby Pearson College might be a possibility. I had taught at this college part-time and knew that they rented the space out for a variety of courses in the summer, when the regular school program was not in session. I spoke to the director of Pearson College and inquired if it might be possible, and, if so, how many people would have to be registered to open the dorms and cafeteria. He replied that it would be possible, but that he would need a minimum of 25 to do it. This would be too many for my course, so I talked to a few professional colleagues in the local art world to see what they might think of starting a summer school for specific disciplines that received scant coverage in the current realm of academic art education. We all agreed to accept half of our usual fee to see if it would be possible, so we formed the Metchosin International Summer School of the Arts (MISSA) as a not-for-profit society. The founding board was Carole Sabiston – Textiles; Cheryl Samuel – Tapestry and First Nations Art; Flemming Jorgensen – Painting; Rona Murray – Poetry; and I served as president. We had no idea whether it would work, but we all felt that it was seriously needed to give alternative art education in a number of areas. The first year, we ran four two-week courses. Judi

became the administrator. MISSA's first year was very successful, much to the surprise of many who thought it was doomed from the beginning. Buoyant with its first successful year and the students' reaction to what we offered, we determined to carry on. At the time of writing, both MISSA and FIRED-UP! are in their 23rd year.

I remained as president of MISSA for 17 years and continue on the board as founding president emeritus. The school is now directed by a strong board. MISSA is a high-energy, exciting, alternative art school that now runs about 30 summer programs per year during a three-week period, and it has developed a solid international reputation through using top-level artists in their diverse fields. I continue to teach my specialty as a master class for experienced professional artists and educators. One important thing I learned from my parents was to always give back to the community that supports you; I feel that starting MISSA has been one of the most important things that I have done for the art community. MISSA has made a difference to many people, from teachers to students. It remains a vibrant force in the arts community of this region and beyond.



Metchosin International Summer School of the Arts (MISSA), glaze analysis class in session, Victoria, British Columbia, Canada. Photo by Meira Mathison.

Improvements in the economy, our retail-only approach to selling our work in our own gallery, and more than 150 workshops between 1983 and 2005 all have

contributed to a reliable, if hard-won, income. It has allowed flexibility in our own work, and although we have been under pressure most of the time, it has been pressure of our own making. I often feel as though I have multiple personalities: functional potter, art potter, ceramic historian and writer, technical researcher and consultant, educator, gardener and garden designer, organizer and arts activist.



Metchosin International Summer School of the Arts (MISSA), painting student and teacher outside.



Pearson College, Metchosin International Summer School of the Arts (MISSA). Photo by Meira Mathison.

BREAKING AWAY

I also severed my associations with the galleries with which I was working, as I

felt that they were mainly interested in manipulating the direction of my work. An artist whose work is quickly recognizable and sells well is often referred to as a blue-chip artist, meaning he or she is eminently marketable. Gallery owners often don't like their bankable artists to change directions in their work. My feelings were that if you didn't keep moving, the work would become dead without regular stimulation from new ideas and inspiration. Several well-wishers warned that without a commercial gallery track record, I would be overlooked, and my work wouldn't fetch optimum prices in auction house sales. Other than in our own gallery at 'Chosin Pottery, I haven't had regular gallery representation for more than 20 years. Although we are out in the country, it doesn't seem to have made one iota of difference to income or visibility so far, and we continue to sell all our work on site. There is a difference in what sells when, but everything usually finds a home at full, retail price.



Judi Dyelle, "Kamloops Series Vase," 2005. Porcelain. Size: 20 cm high x 8 cm wide.

Being free of regular exhibitions has given me several opportunities. I've been able to do more focused work in clay, to write books based on my previous research and experiences that I thought might benefit others, plus there has been the itinerant teaching of workshops in many areas. More time at home also has given me time to focus on another aspect of my varied interests, and the one that mainly

drew me to Vancouver Island in the first place: being a gardener and garden designer.



Judi Dyelle, "Vase," 2005. Porcelain, microcrystalline cobalt glaze. Size: 7.5 cm high x 11.8 cm wide.



Robin Hopper, "Raku Basket," 1983.



“Large Pitcher,” 1983. Earthenware, Arabian luster process with silver and copper brush work.



Judi Dyelle, “Pierced Bowl,” 2005. Porcelain, microcrystalline glaze. Size: 19 cm wide x 6 cm high.



Judi Dyelle, "Celadon Vase," 2005. Porcelain. Size: 24 cm high x 7.5 cm wide.



"Raku Basket," 1983.

READY FOR A CLOSE-UP

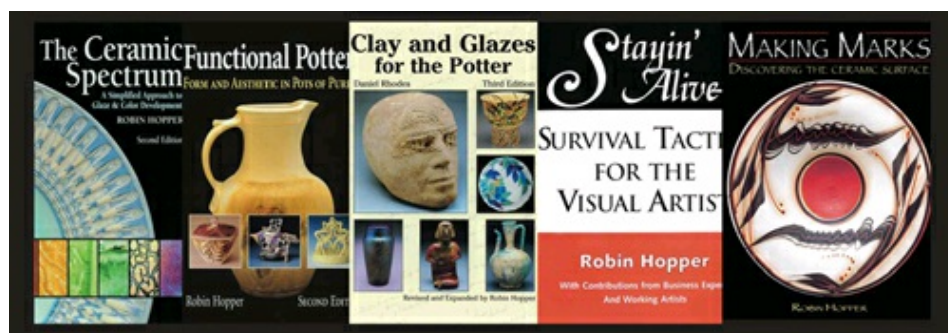
Knowledge is ephemeral. One can't take it with one, and it tends to disappear quickly with age and memory loss, so, if it has value, one might as well leave it behind in a format that might be useful for others. I have been most fortunate that both book and video publishers have felt strongly enough to support my thoughts and research toward the needs of ceramic education.

Early in 1993, Ron Holmes and David Swanson, partners with Tara Productions, approached me about making an educational video. They had read my two published books and asked if I had anything else. I had just canceled my contract on what would have been my third book, "Making Marks: Discovering the Ceramic Surface," for lack of time. Its content was to be a fairly exhaustive coverage of surface decoration processes, from wet clay to post-firing and almost everything in between. I gave Ron and David the book's outline, and they called me a few days later to say that they felt it would make a good series of six or seven videos.

With my theater background and previous experience in film and video, plus a love of both challenge and education, I agreed. I loved the opportunity to perform, I felt comfortable in front of the camera, and I liked the idea of helping others to find concise, individual direction in their work. It was like doing a demonstration workshop with a small, picky audience and one big eye! I spent most of the summer of 1993 working on the videos. The set of six half-hour videos, titled “Making Marks,” was finished in time for Christmas sales, and it received very positive reviews. The following year, we undertook a second, five-part video series based on my second book, “Functional Pottery,” which also received a positive response. Requests prompted us to produce two videos on wheel throwing the following year. All of the videos have had a positive effect on the alternative ceramic educational environment. Since the great majority of my teaching has been outside of the regular academic system, I have been able to teach on my own terms.

Between 1999 and 2004 I wrote five books: three new editions — which are almost as challenging as writing a book from scratch — and two new books. The long-delayed “Making Marks” book was published in 2004, years after its original contract was due. It was preceded by two others, “Stayin’ Alive: Survival Tactics for the Visual Artist” and a third edition of the late Daniel Rhodes’ “Clay and Glazes for the Potter,” which I revised and expanded by incorporating new information developed since the original and second editions were released. It was a great, but somewhat terrifying, honor to work on the Rhodes book, which, together with Bernard Leach’s “A Potter’s Book,” had been the books that I grew up on.

The combination of studio work, videos, books, organizations, teaching and gardening has made the last 12-year period among the busiest, most intense, productive and stimulating ones of my life. Unfortunately, I haven’t yet learned to stop being a workaholic! When given an opportunity or a challenge that will force me learn new directions or explore old ones, I’m usually excited to give it a try. And, if, as a result, it helps others in their artistic growth and development, so much the better!



CHAPTER 4

GUIDES, GURUS, MENTORS AND ROLE MODELS



Mentor: A wise and trusted teacher or guide.

When I started to write this book, I had every intention of writing a short, illustrated discourse on each of the many people who have greatly influenced my thinking and helped in the directions I have chosen. Unfortunately, this would take a whole book in itself to do each of them justice, and it would have exhausted my total image budget before I was a quarter of the way through. I have selected images of work by the ceramists who have had the most effect on my development. With the limited space available, I feel that giving their names and disciplines allows interested readers to research them in depth through the Internet and get a much broader picture than I am able to do here. Most of these artists are well recognized; there should be little difficulty in finding further information.

I've had many guides, gurus, mentors and role models, but I've only met about a half dozen of them. The rest have given me guidance through their work, writings, ideologies or legacies. Some are still alive, others are not. Without their guidance, I would be far less than I have managed to become. I wish to acknowledge what they have meant to me, what I received from them and how it affected my future development. They came from many sources — ceramics, painting, sculpture, architecture, theatre, horticulture and garden design — all of which are the most important avenues that have shaped me and the varied directions of my work for more than half of a century. They have taught me how to think! Since my early work was done in England, I have mainly drawn on influences common to that country and others from the Japanese culture that had a pervasive influence on one or more of my own mentors. This is often referred to as the Bernard Leach, or the Anglo-

Asian, legacy.

If I had grown up and studied in North America, I undoubtedly would have had very different influences and probably produced quite different work. Although I greatly admire the accomplishments of many North American ceramic artists, my formative years were already well past when I arrived in Canada in 1968 at age 28.

Most of us learn our craft from others; comparatively few are self-taught. Even those who say they are self-taught have usually had the educational benefit of teachings, workshops, writings, videos or seeing works by others. I call this education by osmosis or absorption. In my case, the learning process was a combination of both formal and absorptive or osmotic means to satisfy an insatiable appetite to understand. Five years of art school training in the fine arts left me almost totally inadequate in the technical side of the ceramic medium. What I formally learned from my teacher was some discipline, the value of looking into historical development and aesthetics. Informally, I taught myself to understand the behavior of individual ceramic materials by concentrated testing of what they did at varying temperatures and then testing combinations of materials in the same way.



Ray Finch, England, "Casserole," 1968. stoneware with glaze trailing. Private collection. Size: 6" high, 8" diameter.

I learned to throw by realizing the similarities between turning metal and wood on horizontal lathes, which I had done in high school, and throwing clay on a wheel. The potter's wheel is essentially a vertical lathe, although the clay is only tenuously attached at one end. Throwing is a semi-mechanical process that requires

much repetitive practice for good, basic skills to develop. As students, we were not allowed to keep or fire anything until we could consistently throw cylinders 18" high and 6" wide, or 18" wide and 6" high. This may seem like a sadistic form of teaching, but if one really wants to learn the mechanics of this medium, it is amazing how quickly one can learn these disciplines. Once one can control tall and wide cylindrical forms, one can throw almost anything. It then becomes a matter of refining basic skills in the development of form and details to produce objects that intentionally function in a specific way. The more discipline that one can instill in one's hands and mind, the greater the accuracy and efficiency of the throwing process. The same holds true for all of the processes of making.

An awareness of the basic philosophies of aesthetics continues to grow throughout one's working life. An understanding of historical development of the ceramic object gives a foundation to the 10,000 years or more that this medium has been around. Almost everything that can be done has already been done. In the development of a personal ceramic identity, I found it an enormous help to be aware of previous historical directions in order to forge new ones. My formal ceramic education helped to do that. Where the differing guides, gurus, mentors, role models or groups of these individuals came in was finding the directions in my work that might be in some way helped by their work or ideas. The more diverse one's influences, the less that one will tend to produce work that is a pastiche or plagiarism of someone else's work. Each group had its more or less significant individuals, people whom I responded to viscerally, depending on the prevailing directions in my own work at the time. Some individuals had influence in various groups.



Bernard Leach, England, "Vase," 1968. Collection of the Winnipeg Art Gallery, Canada. Size: 14" high. Photo by Ernest Mayer.

The first group, mainly architects, engineers, sculptors and structure builders, made me predominantly look at form. This group included sculptors Kenneth Armitage, Constantin Brancusi, Barbara Hepworth, Amedeo Modigliani, Henry Moore, Isamu Noguchi and architects Le Corbusier, Antonio Gaudi, Kenzo Tange, Frank Lloyd Wright, Buckminster Fuller, Walter Gropius and Joern Utzon, with more recent influences from Canadian architects Douglas Cardinal, Arthur Erickson, Frank O. Gehry, Raymond Moriyama, Moshe Safdie and John and Patricia Patkau. I find it particularly informative to look at their works and writings to find the lineage of their ideas and how they transformed the three-dimensional form.

A second group, mainly painters, printmakers and designers, helped to satisfy my visual approach to surface, pattern and two-dimensional design. Among this group of mark-makers par excellence are Christopher Dresser, Vincent Van Gogh, Adolph Gottlieb, William Morris, Pablo Picasso, Paul Gauguin, Joan Miro, the Canadian Group of Seven painters, Paul Klee, Franz Kline, Robert Motherwell, Jackson Pollock, Mark Rothko and Mark Tobey. As a former embryonic painter and printmaker, my work has almost always been very concerned with surface, color and mark-making.

A third group influenced my thinking on the technical aspects of the medium and differing approaches to the ceramic surface, glaze and color development. This group included mainly international ceramics artists: J. Llorens Artigas, William de Morgan, Clement Massier, Harry Horlock Stringer, Frederick Hurten Rhead, Lucie Rie, Adelaide Alsop Robineau, Daniel Rhodes and Vivika and Otto Heino.

The fourth group, probably the most unusual influences for a potter, comprised theater and garden designers or landscape architects. They gave me pointers to deal with space from the microcosm of a ceramic piece to the macrocosm of a whole environment. Among this group are garden designers Roberto Burle Marx, Russell Page, Frederick Law Olmsted, Mirei Shigemori, Beth Chatto and Julie Moir Messervy.

A fifth group was made up of those ceramic artists who mainly looked at ceramics as an important art form at a time when it was largely denigrated by the art establishment. They were particularly significant in breaking down the preconceived and arbitrary division of art and craft. They included Hans Coper, Michael Casson, William Staite Murray, Lucie Rie, Ruth Duckworth and Samuel Haile. Through the writings of Bernard Leach and Soetsu Yanagi, I was introduced to the works of a group of important Japanese artists, Shoji Hamada, Kanjiro Kawai, Kitaoji Rosanjin, Kenkichi Tomimoto and Tatsuzo Shimaoka. From them, I learned something of Japanese culture, Japanese ceramic history and aesthetics. Awareness of a wide range of different artists past and present and variations of the approach to the clay medium have made me quickly realize that the world of ceramic expression is limitless.



Shoji Hamada, Japan, "Three Tea Bowls," 1966. Collection of the Winnipeg Art Gallery, Canada. Size: 8.9 cm high. Photo by Ernest Mayer.



Michael Casson, England, "Jug," 1992. Collection of the Winnipeg Art Gallery, Canada. Size: 41 cm high. Photo by Ernest Mayer.



Harry Davis, New Zealand, "Bowl", 1967. Crewenna Pottery, New Zealand. Private collection. Size: 12" diameter, 3" high.

When I decided that I would try to make my living by making predominantly functional pottery, I first looked at work by all the major functional potters and decided what I wanted to make as a range of work. I wanted to know what was in the marketplace so that I could avoid making derivative work. The major English functional workshops that I was aware of at that time were the Leach Pottery of Bernard Leach; Lowerdown Pottery of Bernard Leach's son, David Leach; Crowan Pottery of Harry and May Davis; Aldermaston Pottery of Alan Caiger-Smith; Wenford Bridge Pottery of Michael Cardew; Winchcombe Pottery of Ray Finch; Quay Pottery of Colin Pearson; and Prestwood Pottery of Michael and Sheila Casson. In conjunction with historical pottery, the work of these potters became my leading inspiration and benchmark for functional work. Their works were mainly a synthesis of traditional English and French country pottery styles, overlaid with aesthetics and technology from Asia, primarily Japan.

My mentors in the nonfunctional arena were much more diverse. These were painters, sculptors, architects, landscape architects and set and costume designers — people who worked with the interpretation of ideas. Sometimes, their influences were very profound; other times, they were extremely subtle. They had a much greater effect on my visual thinking regarding the one-of-a-kind work that was to form approximately 50 percent of my overall production. It was mainly here that the layering aspects of painting and printmaking took hold. Ideas for form also largely came from mathematics, particularly geometry (see Chapter 8), and various ratios found within the human frame. Overall, my two most important ceramic influences were William Staite Murray and Hans Coper.



Lucie Rie, England, "Vase," 1976. Size: 9" high. Private collection.



Alan Caiger-Smith, England, "Goblet," 1974. Lustered earthenware. Private collection. Size: 7" high.

It wasn't until a few years after graduation, when I was starting my first studio and developing a range of work, that I realized how little I knew about the areas of clays, slips, glazes, coloration, kilns and firing. When I realized my technical deficiencies, I did personal research through what few books were then available and talked to a few mentors. I found this very difficult, because I was inherently shy and I didn't know what questions to ask or how to phrase them. So I became preoccupied with experimentation, observation and intuition. For me, this self-imposed combination of learning sources gave a much richer learning curve than the limitations of a small college faculty. My guides in this area were often historical figures who had specialized in particular technical research.



Michael Cardew, England, "Abuja Jug," 1965. Collection of the Winnipeg Art Gallery, Canada. Size: 6" high.
Photo by Ernest Mayer.

When we become expert enough in the manipulation of clay and the demanding technical aspects of our medium, craft can develop to become art. To get to this point usually demands a great deal of time, energy and research of some form. Whether the skills are being used to create functional or domestic pottery or one-of-a-kind artworks, the ceramic medium is one of the most complex in the realm of art. It is a unique combination of art and science, with elements of painting, sculpture and printmaking intertwined.

Art requires aesthetic content or artistic vision to take it from the mundane and into the more advanced planes of existence. Because an object might be made from clay that has been worked by hand in any of a wide variety of processes doesn't, in itself, give it artistic content or merit. In addition to the necessary manipulative skills, it requires considerations of thought, philosophy and idea to make the step from a clay object to a work of art. It is here where many people find great difficulty in pulling all of the threads together. It is also here that it becomes beneficial to study the works and words of others who have already gone through much the same search. The wider the foundation of ideas that one can put together, the more diverse the influence will be; it will help to eliminate the problems of

plagiarism and making work that bears an uncanny resemblance to somebody else's.



Hans Coper, England, "Spade-Form Vase," 1974. Private collection. Size: 9" high, 7" wide.



Samuel Haile, England, "Plate," 1947. earthenware with slip trailing. Size: 12" wide. Collection of the Museum of Art, University of Michigan.

We are all influenced in many ways. It is in learning how to adapt those influences where the true artist shows his or her mettle. Both Spanish visual artist Pablo Picasso and Russian composer Igor Stravinsky have been credited with this statement "Mediocre artists borrow; Great artists steal!" The more that one is attracted by a single other person's work, the more beneficial it becomes to look at their early work, as it is almost inevitably here that their work shows its greatest influences from other sources.

One of the more important aspects of looking at the works of mentors is to find out who they are or were and what motivated them, and not to usurp and diminish their identities by plagiarizing what they did. Every artist that I know, numbering into the thousands, owes a debt of gratitude to those from whom they have learned. Over the years, I've tried to purchase works by the artists who have been major influences on my life on my life and work. This way, I have a constant reminder of my personal debt to them and the need to help others' development when the opportunity arises.

I feel extremely fortunate that my career over the last five decades, with time

spent on four continents, has coincided with one of the most exciting periods of world ceramic history and development. If I had been able to choose a time to be born and live, I can't think I could have planned it better. I have managed to meet, get to know and learn from most of the seminal ceramics artists of the last half-century on both sides of the Atlantic. A host of anonymous potters whose works I find through my continual visits to museums around the world also have inspired me to follow their lineage. Their efforts have so often been the foundation of my own directions. What they have taught me has been the diverse groundwork that I have been able to absorb, digest and pass on to others.



Vivika and Otto Heino, United States of America, "Vase," 1970. Stoneware. Private collection. Size: Height 3" high, 5" diameter.



David Leach, England, "Vase," 1992. Collection of the Winnipeg Art Gallery, Canada. Size: 8" high. Photo by Ernest Mayer.

CHAPTER 5

LIFESTYLE CHOICES — LIFE AS A JOURNEY



“I dream my painting, and then I paint my dream.”

-Vincent van Gogh

“I dreamt my life, and then I lived my dream.”

-Robin Hopper

My dream while at art school was to become an artist who explored ceramics through individual directions and who avoided repetitive production work. Then, reality set in! If I wanted to make a living working in clay, it would either have to be through a combination of teaching and one-of-a-kind artwork or through a comparatively large volume of utilitarian pottery and a small amount of one-of-a-kind work. At the time, there was little teaching available, so I opted for production work as a basic source of income.

There is almost always a good demand for functional work, depending on its design and execution. There is much less demand for one-of-a-kind or speculative artwork, particularly by emerging or new artists. Exciting, new, individual work usually draws heavily upon strong skills and extensive life experiences to bring real value to the ideas.

Doing repetitive work builds the skills necessary to make almost anything. When one has developed good throwing skills, it is comparatively easy to then use the wheel as a tool to interpret ideas. From my years of experience observing the

world of wheel-thrown clay, the artists who made the finest functional work also made most of the finest one-of-a-kind work. When one can eliminate thinking about process or how to do something, one can focus on vision and result or why to do something. With a solid foundation in manipulating clay, the visualization, or mind's eye view, of what one wants to make is much more fluently and eloquently achieved.

The amount of time usually spent in a ceramic program in art school, college or university is barely enough to thoroughly develop manipulation and embryonic technical skills, let alone complex visualization skills. In music, you don't normally try to play a concerto before you have mastered scales and arpeggios! A ceramic object is like frozen music — once fluid, then solid, requiring much practice to gain control. Once one gains control, getting to where one wants to go is a lifetime journey of interpretation of ideas. The more one demands of oneself, the better the result is likely to be. The better the result, the more likely one can build a life around it. The more that one knows oneself, the more one is likely to achieve one's goals and dreams.

How to develop a life and lifestyle as an artist depends on many variables beyond skill and vision. It is a matter of deciding what one wants to do and what might be important in life. Where one might wish to live is part of that vision. For me, my immediate environment is high on my priority list, since it nurtures my creativity in a number of ways. Fortunately, an artist is generally more flexible than most in terms of finding the ultimate place for work. With portable skills, it is possible to move from continent to continent and country to country to find one's personal paradise. I know from personal experience.

Unfortunately, it is not just about having a passion for clay. The sensual and visceral reactions to a malleable material are one thing; making a life and living from it is quite another. For many, it is a beautiful dream; for others, it may be a horrible nightmare. One needs to ask oneself many questions to determine one's suitability for this direction in life. Generally, it is not for the lazy, the faint of heart or those with high-income expectations. It is usually a question of passion, the belief in doing something that has true value and that adds to the quality of life. Being a potter or ceramic artist is something of a paradox. It is a curious combination of hard work that usually doesn't seem like hard work, along with great joy tinged with much frustration.

If one doesn't have to worry about income production, one can approach the medium as a purely educational journey that can keep one fully involved for many decades. After 50 years of manipulating mud and minerals, I still feel that I'm only

scratching the surface, as one can approach it in so many ways. Bernard Leach is reputed to have said, “If you changed your mind about your approach to working in clay every second day for not less than 80 years, you need never cover the same ground twice.” I can’t imagine another discipline that has that degree of potential for exploration!

If one needs to have a full income from one’s efforts, the picture is quite different. The usual options are either teaching as a support income, full studio involvement or possible combinations often including some spousal dependency. One needs to evaluate one’s personality, abilities, responsibilities, motivation and directions carefully. If one is gregarious and needs people around, perhaps the teaching route is best. If one is a loner, an isolated working situation might be perfect. Either way, there are a host of searching questions that should be considered before jumping into the real world vs. the cloistered security of academia, such as: How might the chosen path affect personal or family relationships? How does one deal with the isolation factor of working alone? Would it be better to work in a cooperative situation where costs and jobs are shared? How does one budget one’s time when there are many jobs needing to be done? What are one’s family responsibilities? What are one’s financial liabilities? How much or how little does one need to do to gain the income needed to cover these responsibilities? What type (or types) of work is one interested in making? What is one good at? What are one’s personal limitations? How is one’s health? Where does one wish to live? Does the work that one wants to do control the housing or studio areas in which it can be done? Does this mean a specific firing process to achieve the desired results? Does it require a particular firing process to work within local laws? Is one disciplined and endowed with a strong work ethic? How about the business end of being an artist? How does one set prices for and sell one’s work? How does the world get to know of one’s existence?

I question whether anyone is clairvoyant enough to accurately predict what the future holds. Although there are many potters of differing levels around today, when I was young and attending art school, there were few amateur or semi-professional potters, and the role of a potter as a self-employed studio practitioner was a relatively unusual concept. The strata that formed the development ground for emergent artists was minimal, and there was little in the way of potters’ organizational support structures. Art and craft fairs didn’t exist, and ceramic educational conferences were a distinct rarity. Although some multidisciplinary organizations or guilds existed in London and elsewhere, it was the founding of the Craftsmen Potters Association in 1958 that opened up new opportunities and

increased visibility, particularly through the development of a central London exhibition and retail facility. It was mainly the efforts of young professional potters and some teachers that started this important association. I was at the group's first meeting, and I became the first student member. Because of other work, I was never very active in the association, but it was comforting to see that others were already treading the road that I eventually wanted to travel. I knew what I wanted to do with my life from the age of 16. My dream was very clear, and I planned my life around the vision of being a studio artist, probably living in the country and having an interesting house and environment to live in where I could indulge my other great love of gardening. Between the dream and the current reality, several studios and gardens educated me along the way. My skills as a designer and carpenter from my theater days allowed me to build and renovate homes and studios. I always viewed the development of a garden as part of the attraction for visitors to the studio. I've always tried to make our whole living and working environment a "destination" of interest that is more than the sum of its parts.

Although I've changed continents since I dreamt my life's goal nearly half a century ago, much remains essentially unchanged. Now, however, there many support structures at different levels from hobbyists to professionals. There are abundant sales opportunities, including the ubiquitous art fairs, gallery exposure, retail sales, wholesale outlets, commission and consignment. The process of doing business has greatly changed in speed and efficiency. The arrival of the Internet has made a potter's work visible and purchasable worldwide through Web sites and links, rather than limiting it to the confines of a small geographic area. Never before has such immediate, universal visibility been available at any price, regardless of whether it is good, bad or indifferent. In an instant, anyone can show anything and find an audience for what they are doing. Compared with a halfcentury ago, there is a fairly knowledgeable and sophisticated market. The varied opportunities to develop a life as an artist doing quality work are probably better now than at any time in the last 100 years. One just needs to make the move toward finding nirvana by being suitably equipped with skills, knowledge and a positive attitude. Thus armed, the journey will hopefully unfold according to plan or desire! The power of positive thought can work wonders — never leave home without it!

It was the Leach Pottery and the works of Bernard Leach's followers mentioned in the last chapter that greatly influenced my direction and goals for life. I suppose that the logical thing would have been to try to find an apprenticeship with one of my idols, but I couldn't imagine working for one of my personal gods, and, quite frankly, it never occurred to me to ask! Being obstinate (as any true Taurean usually

is), focused and thoroughly committed to what I wanted to do, I had to do it on my terms. Fortunately, almost all of my role models had a similar pattern of education, initially in painting, drawing and printmaking before thorough immersion in ceramics. I felt comfortable in the thought that if they could do it, so could I! I visualized where I wanted to be in five, 10 or 15 years, and I worked to make it a reality. The vision changed beyond my wildest dreams, but it still retains most elements of the original, although in a different country and on a different scale.

Although finances were tight, I had other alternative sources of potential income that I could return to should the going get too rough to continue the pottery. Coming from a smallbusiness family, I was well aware from an early age how a business operated. A pottery was only marginally different. In my family's grocery store, products were purchased for a wholesale price, marked up and sold at a retail price. Simply put, the price difference produced income on one hand and allowed for product to be re-ordered to start the process over again on the other. Before I was in school, I used to accompany my mother to the bank every Monday to deposit the proceeds of the previous week. It was a regular rhythm and a discipline that I related to, not unlike the rhythms of pottery making.

My first real studio was in a converted and renovated church in a small village in England. When I felt confident enough with the quality of my work and that it might find a market, I had samples photographed for a portfolio. (See Chapter 1.) I developed a range of what I thought might be acceptable to the public at the same time I gave myself creative control of a product that I felt good about. I trained myself to produce a reliable and repeatable line of work. The ware was stoneware, electric fired at cone 8, with a glaze palette limited to three glazes: a satin-white that had iron brushwork; a dark brown to black, high-iron content tenmoku; and a soft gray-green ash glaze, both of which had sgraffito decoration. There was also an iron slip, simple sgraffito pattern and white glaze variation.



Barnes House, interior. England, 1962. Photo by Robin Hopper.



Barnes House, interior. England, 1962. Photo by Robin Hopper.



Kintbury House, exterior. England, 1964. Photo by Robin Hopper.

I researched the crafts galleries in London and the south of England, made appointments to meet the gallery owners and organized a “getting acquainted” tour. On arriving at the gallery, I first showed my portfolio. If they were interested in what I had to offer, I had samples in the car that they could look at and order from. I gave them a date when I would deliver the goods, and then I took the order. After about a week on this tour, I had enough orders that I estimated would take two months to complete. I tried to make sure that the orders were completed at least a week prior to promised delivery time. After the first batch was done, I did the same type of tour in the areas north of London in a broad band across the country. When that was completed, I did the same in another broad sweep, further north to the Midlands. After six months, I repeated the three tours. In a year, I had enough outlets for my work to keep on going by regular phone orders until I left the country some four years later to move to Canada. My “tour” method of selling worked well in England, a small country with a relatively dense population. However, with Canada’s enormous physical space and relatively sparse population, the overall concept still worked, but it made more sense to concentrate on cities and urban

areas.



Kintbury House, exterior. England, 1963. Photo by Robin Hopper.



First Published Magazine Article about Kintbury House and Studio.

My second studio was in one of those urban areas, in a duct-strangled basement in Toronto. After two years of central city life, we moved further north to a small

country village to develop studio number three and start to develop the garden that had been a major long-term goal ever since I was a teenager. After a further seven years of building a reputation for work and reliability in Ontario and realizing that I couldn't build the garden that I wanted in that particular climate, we moved to Canada's West Coast. Here, I indulged myself in garden building in one of the best temperate regions of North America for gardens. Finally, I had found my particular paradise where I could put down roots and develop my garden. I have been in this haven for nearly 30 years. It is most unlikely that I will move again, at least while I'm still alive! I don't think I could find a better paradise that suits all of my needs.



Hillsdale House, dining room. Ontario, Canada, 1974. Photo by Robin Hopper.



Metchosin House. British Columbia, Canada, 1980. Photo by Robin Hopper.



Hillsdale House, exterior. Ontario, Canada, 1974. Photo by Robin Hopper.



Hillsdale Pottery Studio. Ontario, Canada, 1974. Photo by Robin Hopper.



Plan for The Garden at 'Chosin Pottery.



The Garden at 'Chosin Pottery, 2003. Photo by Robin Hopper.



The Garden at 'Chosin Pottery, Gladiator's Tunnel, 1998. Photo by Robin Hopper.



The Garden at 'Chosin Pottery, transition area, 2003. Photo by Robin Hopper.



The Garden at 'Chosin Pottery, inner garden from roof. Photo by Robin Hopper.



The Garden at 'Chosin Pottery, woodland with figures, 2006. Figures by Ann Linnemann, Denmark, 4' 6" to 4' 10" high, wood-fired porcelain.

I've lived one-third of my life in urban areas that, for me, generate one type of frenetic stimulus. The other two-thirds of my life has been in rural areas that I find more conducive to the rhythms and practice of my work and interests in general. I now live and work in the country with a 10-minute walk to the beach and a half-hour drive to a major city that has far more going on than I have time to make use of. The garden that we've built is what I call "ANGLOJAPANADIAN" in style; ANGLO, because that is where I first fell in love with gardens and learned the beginnings of the art; JAPA, as the garden is a homage to the culture and gardens of Japan, incorporating the five basic garden styles — stroll, scroll, tea, zen and tsuboniwa or courtyard; and NADIAN, as it uses a lot of Canadian-native plants as well as hundreds of plant varieties that come from the Orient. It has been a major preoccupation that has given us a very special living and working environment that has been both resource for the spirit and inspiration for much of my work. Like many large Japanese stroll gardens, it tells the story of a life.



Gallery at 'Chosin Pottery.



Studio at 'Chosin Pottery, bisque-fired birds.

The garden is a sanctuary with nonstop action from birds and other wildlife and a meditation haven for spiritual rejuvenation. We have many garden visitors, some of whom use it as a healing garden. It is now well-established and gives me a great deal of satisfaction as an environment in which to live as well as be inspired for some of the porcelain work that I make. That long-term goal of a garden, made so many years ago, has developed way beyond my dreams. As I often tell people in my workshops: I live in paradise, play with mud like a regressive child, have a great time doing it, give pleasure to others by having done it and still make a buck at the same time! What more satisfaction can one person get?



“The River Koi,” The Garden at 'Chosin Pottery, 2003. Cement, ceramic and rock roadway. Photo by Sharron Millstein.

For me, the road to paradise has been circuitous but always interesting. Setting an impossible goal or dreaming beyond reality has always been the carrot that keeps this old donkey moving forward. I often wear a T-shirt with credo “THINK BIG” emblazoned across the chest. I have always tried to think of the most stimulating way to live life and do my work. One can always scale back and lessen hopes and expectations in life, but without personal challenge, we seldom live up to our potential. Think of the most that one might achieve. It has always been important for me personally to look for the ultimate in life, research it as thoroughly as possible and go for it!

All of the finest artists I’ve known have been risk takers who have made life a one-of-a-kind affair. It seems to be a perfectly logical thing to do. After all, we are all born unique; how come so many die as clones? In exploring one’s individuality, there is seldom much to lose and usually much to be gained. Challenging life itself with vision can be one of the greatest forms of stimulus to achieving an exciting life and lifestyle. Conservatism rarely makes for excitement! Without vision, it is a gray, monotone world. With vision, life takes on the mysterious, evanescent

qualities of a rainbow, sometimes with intense, vibrant hues and other times with gentle, pastel tints, but always with color.

At the time of writing this book, I have been around for 67 years, 63 which have in some way been seriously involved with making things. It has been a great journey, and I have been fortunate indeed with long-term vision, good planning, plus lucky — and occasionally informed — decisions along the way. Much of life can't be pre-planned, but, where possible, a cogent plan or objective greatly helps identify turning points, decision making and areas of potential or probable success.



Studio at 'Chosin Pottery, attaching handles.



Studio at 'Chosin Pottery, decorated ware ready for firing.



The Garden at 'Chosin Pottery, inner garden, fall 2001. Photo by Sharron Millstein.

PART II

SURVIVAL TACTICS



“It isn’t only a matter of ethic, ethics is your duty to your neighbor. Aesthetics is much bigger than ethics; aesthetics is your duty to the whole universe you’re in.”

-Michael Cardew

Glorious Mud — Film by Canadian Broadcasting Corporation —
Part of the Hand and Eye Series 1982-1984

CHAPTER 6

THE LINE OF DEFENSE — THE FUNCTIONAL RANGE



To some, the title of this chapter may seem negative or even pejorative. Far from it! It points to a reality in life where being defensive allows continued existence, where a line of attack might just curtail or end it.

Functional pottery generally has a much greater long-term potential for sales, as people always need things to use in the domestic scenario. One-of-a-kind work is much more speculative by nature. It needs the right buyer to come along and fall in love with the piece, realize its potential investment value, or both. It usually takes any artist a considerable time to develop a reliable customer base for speculative work. Making functional pottery allows one to hone manipulation skills and develop visualization and conceptual abilities. The potential for future growth and development to some extent — often to great extent — depends on successes of the past. Success may be viewed in both artistic and financial terms.

Although I was convinced quite early on that I wanted to use the ceramic medium as a form of personal artistic expression beyond the making of functional objects, I also knew that I didn't have the skills, knowledge and vision to be able to do this. It would take years before I felt comfortable about calling myself an artist. I didn't even feel comfortable about calling myself a potter for about 10 years, because it meant classifying myself with that group of people who were my personal idols. Realizing this, I decided that I could probably develop all of the skills that I needed for expressive work through the avenues of domestic wares for use in the home. It wasn't a matter of "second best," because I decided that if this was to be my initial direction, I would do it to the best of my ability. As a result, I have been able to maintain a reasonable standard of living for more than 40 years through a combination of both functional work and speculative artwork. It varies

from 60 percent functional and 40 percent speculative to 60 percent speculative and 40 percent functional, largely dependent on the economy. I greatly enjoy the changing balance, and it is unlikely that I will ever totally eliminate one in favor of the other.

During the period between finishing art school and starting my first studio, I divided my time working in London for about four months, Europe for four months and other parts of England for the remaining four months. I had ample opportunity to visit many museums, galleries, stores, studios and markets to get a feel for what I wanted to produce when I was able. I looked at pots at every chance, and I kept my sketchbook handy all the time, making drawings and jotting down ideas for future reference. As a lover of diverse ethnic foods and the ways they are both cooked and served, I started to draw a sketchbook “database” that would be invaluable once I had a studio to make them in. I looked at functional objects that were used by all segments of society, from peasants to royalty, asking questions. Why did they look like they do? What were they used for? What made them work? Were they for the daily grind or the special occasion, for basic sustenance or celebration? I delved deeper by conducting a primitive user survey about functional pottery with groups of women on what they felt constituted the ultimate requirements for any particular functional object (because women were usually the ones to purchase and use such pieces).

Armed with all of my research, I started to design basic concepts on paper. This is the way we had been taught to do things in art school. The difference between a drawing and a thrown object is immense, but a drawing is a quick approach to help develop ideas. Sometimes, a simple line can quickly capture the essence of the idea, where throwing it might not. My strangely analytical mind has always served me well. Long before I had clay up my fingernails again, I had a whole range of functional objects planned and ready to go. My severely limited technical knowledge at the time allowed three glaze bases that I knew would work, and I knew what type of kiln I would be using, so I was set to go as soon as the opportunity arose.

Some of the functional range developed and made in England is shown in Chapter 1 of this book. Although it is always in a state of review and reconsideration, it formed the basis of what I still produce after nearly 40 years in North America. I often think of myself as a somewhat schizophrenic mud-pusher because approximately half of my clay work is the basic functional range, and the rest is comprised of one-of-a-kind or one-of-a-family expressive artworks. I enjoy the dichotomy. To get a glimpse of the other half of my ceramic personality, refer to

Chapters 11 and 12.

The functional range includes most domestic pottery forms, such as cooking pots, tea ware, drinking vessels, pouring vessels, serving vessels and containers. We have cut back on the original line, as there is just not time to keep up with the demand at the same time as developing new directions. Other than a few press-molded forms, it is all wheel thrown. With the help of my assistants, Arlene Yarnell and Shana Watson, the functional range is made and finished in one of five different glaze bases; I do all of the decorative processes myself. Arlene helps to produce some of the range, and both Arlene and Shana do foundation glaze application on all of our functional work.

To give our customers an opportunity for variety — and also to add to collections that may have been a long time in the making — all of the functional range is done in five different glaze variations that form a continuum and were developed to be food safe, practical and beautiful. The glazes and decorative combinations are:

- **Blue:** Blue-gray with green and black brushwork decoration and occasional teal-blue glaze trailing;
- **Blue-White:** White with blue decoration;
- **White-Brown:** White with beige and brown decoration;
- **Honey-Gold:** Semi-matte with brown decoration;
- **Dark Brown to Black Tenmoku:** Featuring orange and black brush decoration and occasional white glaze trailing.

The clay used throughout is porcelain of my own making. The functional range is all gas-fired in reduction at cone 10. The range of glazes gives plenty of variety for general use, but enough conformity to satisfy the few fastidious clients who want things to all look the same. I usually tell them that things are a family, and that children from the same parents are never the same! Sometimes it works, others not. (One has to be very patient and philosophical when dealing with customers if one wants to stay in business!)

I decorate the ware on top of the unfired glaze in a modified Majolica style with abstracted plantform brush decoration that has become a distinctive signature. We try to keep a full inventory of the range in our gallery at all times, since that is the

only regular sales venue for the work. Keeping a constant product line of functional work that can be produced efficiently and sold at a reasonable price while it is still aesthetically pleasing and truly functional has always been one of the goals of the studio as our basic income.

THE FUNCTIONAL RANGE

The images to the end of this chapter show a small, but representative, variety of the functional range, plus a few one-of-a-kind funerary urns.

POTS FOR COOKING



“Side-Handled Casserole,” 1985. Moss-green glaze, rutile glaze brushed on with iron brushwork. Size: 6" high x 8" diameter.



“Small, Straight-Sided Casserole,” 2005. Honey gold glaze with rutile glaze brushed on, iron brushwork and white glaze trailing. Size: 5" high x 7" diameter.



“Boat-Form Casserole,” 1985. Moss-green glaze, rutile glaze over and iron brushwork. Size: 8" high x 10" wide.



“Wide and Low Squash Casserole,” 2001. Tenmoku glaze with rutile glaze brushed over, iron brushwork and white trail glaze. Size: 4" high x 11" diameter.

POTS FOR SERVING



“Two Salmon Plates,” 2005. Press molded, tenmoku glaze variation at left, rutile blue glaze variation at right. Glaze trailing and brushwork. Size: 20" long x 8" wide x 2" high.



“Large Cooking/Serving Dish,” 2000. Tenmoku glaze variation. Size: 18" diameter.



“Rectangular Tray or Lasagna Dish,” 2005. Press molded with tenmoku glaze variation. Brushed-on glazes, glaze trailing and brushwork. Size: 18" long x 11" wide x 3" deep.



“Small Cooking/Serving Dish,” 2000. Rutile blue-gray variation. Size: 14" diameter.



“Serving Bowl,” 2005. White glaze variation. Size: 5" high x 9" diameter.

POTS FOR STORING



“Rum pot,” 2006. White glaze with iron brushwork. Size: 18" high x 8" wide.



"Salt and Pepper Shakers," 1985. White glaze variations. Size: 4" high x 2" diameter.



"Butter Dish," 2005. Rutile blue-gray variations. Size: 4" high x 6" diameter.

POTS FOR POURING



“Small Decanter,” 2001. Tenmoku glaze variation. Size: 8" high x 5" diameter.



“Pitcher and Cream Jug,” 2006. White glaze variation.
Pitcher size: 11" high x 5" diameter.



“Witches Teapot,” 1995. Oatmeal glaze over stoneware clay with iron brushwork. Size: 7" high x 9" diameter.



“Teapot, Cream and Sugar,” 2005. White glaze variation. Teapot size: 9" high.

POTS FOR DRINKING



“Chalice,” 2000. Celadon glaze inside, tenmoku variation outside. Size: 7" high x 4" diameter.



“Goblets,” 1985. Red-brown glaze, rutile glaze brushed on, iron brushwork. Size: 7" high x 3" diameter.



“Medium Coffee Mugs,” 2006. A range of five glaze variations is shown here. Size: 5" high x 3" diameter.

POTS FOR EATING



“Dinner Plate,” 2004. Slip-decorated porcelain, thin white glaze over. Size: 12" diameter x 1" high.



“Dinnerware,” 1983. Celadon and tenmoku variations with brushwork and trailed white glaze decoration. Largest plate’s size: 11" diameter.



“Soup Bowl,” 2006. Blue-white glaze variation. Size: 3" high x 5" wide.

POTS FOR THE ASHES OF THE DEAD



“Classical Urn,” 2005. Tenmoku glaze variation and white glaze trailing. Size: 10" high x 9" diameter.



"Urn," 2004. Thrown and altered. Iron crystal glaze with rutile glaze brushed over, white trail glaze. Size: 9" high x 7" diameter.



“Urn,” 2004. Shino glaze with iron brushwork. Gas fired, reduction to cone 10. Size: 9" high x 7" diameter.

CHAPTER 7

THOUGHTS ABOUT FUNCTION — DESIGN AND DEVELOPMENT



Details of pots are very important parts; essentially, they are the reasons why the object functions. They certainly tell very quickly the degree of mastery any potter has over his medium. Sadly, details often are neglected in the degree of consideration given to them, and many a potentially good pot suffers needlessly as a result.

Pots designed to function should do just that. There is really no excuse for objects to function badly just because they are made by hand. In fact, they should really function better than any industrial models, because handmade pots have the caring, close attention to detail the industry cannot closely control. The potter has a responsibility to thoroughly think out the object he makes and to make it as well as it can be made.

The buying public is often badly underestimated by potters, and all manner of functional inadequacies are lavished upon them. There is no limit to the expression an individual potter can put into his functional pottery, but it should be done with great concern for the real requirements of that object. Certainly this represents a great and often frustrating challenge to the maker, as it makes the need to compromise a major factor in production.

Objects made to function can also be works of art, as the past has so often shown us. One only has to see tomb objects from almost any period to realize this. There is nothing mundane about making functional pottery for use by people; it is a demanding process that requires all of the artistry and skill that can be mustered to solve the problems, which the design and making of any given object deserves. Making good functional pottery is not making art for art's sake, it is making art for people's sake.

This chapter is a down-to-earth section dealing with the pragmatic approach to the design and production of functional pottery, primarily by use of a potter's wheel. Although functional studio pottery can be — and often is — made by other methods, the great majority of studio pottery is made on the wheel, which is still the most efficient and most widely used tool to produce most styles of handmade or limited-run pottery.

For those who prefer to make things by other hand methods, much of what is stated here in terms of design analysis and attention to detail is just as relevant. All methods have their good points, and it is a purely personal matter how one approaches their development. To make a living at any form of pottery making requires a high degree of efficiency and discipline, as well as a sound personal vision.

In the hope of simplifying the process of design, take a number of regularly produced functional objects — cooking pots, pouring and drinking vessels, pots for eating, pots for storing, pots for rituals and pots for flowers — and analyze their intended requirements. Perhaps the easiest way for a potter to begin is to develop a good understanding of the needs that any potential purchaser sees as priorities before a purchase is made. Just what is it that is required in an object? Can the maker match the requirements within a satisfactory degree of compromise? This can be developed in what I call a “mini-market-research” approach, accomplished by getting a group of potential buyers and users together to ask their opinions on what they look for in a specific object.

While I am not suggesting that the potter should kowtow to the whims of the buying public, he should at least have a fair idea of needs of concern that may be incorporated in the final object. For example, if you ask a dozen people what they might look for in purchasing a mug, you will probably find at least five variations — not counting form or volume — related to the size and placement of a handle alone. There are the one-finger people, two-finger people, wholefist people, people who put their thumb through the handle and hold the mug from below, not to mention those who turn the handle away and hold the mug by the handleless side, like an Oriental tea bowl.

It is impossible to satisfy every single person's desires and in so doing produce the ultimate mug, but one can at least see the logic behind the analytical process. The more of these perceived priorities a potter can accommodate, the more likely the objects will find an appreciative audience. It is an interesting exercise to question potential buyers, as they often have clear-cut views about what they will buy. Bearing these needs in mind, the potter can then superimpose his own aesthetic

view, and the resulting object should most likely look good, work efficiently, satisfy the desires of both maker and buyer and also sell well. Each of the previously mentioned groups of functional objects is analyzed in this way from criteria that I have found by experience to work well.

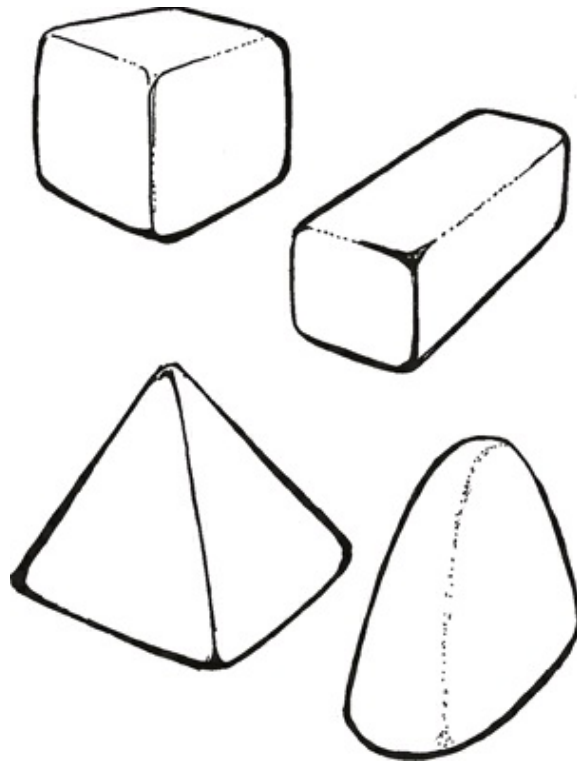
I find an analytical approach coupled with meticulous attention to details usually works to develop a viable product for either short- or long-term production. Three critical concerns — analysis, practice and considerations — in concert with the potter's own aesthetic and intuitive sensitivity, should help to develop and produce well-designed and well-made objects. Analysis refers to what the object is intended to do; it also includes some discussion on aesthetics. Practice refers to technicalities of which one should be aware, such as spouts and handles that twist, forms that alter in firing and lids that seem to change in size. Considerations refers to a list of priorities gained from group discussions, put in question form. There are certain generalities that many pots have in common. I refer to these as details, and they may be applicable to many different types of functional objects. Details include edges, galleries, flanges, lids, covers, spouts and pouring lips, handles, lugs, knobs and feet. To a large extent, the basic form of a functional object looks after itself once design considerations have been analyzed and a suitable form selected. Details are much more difficult to deal with, not only in technique, but also in aesthetics. How the details look, feel and work are what marks the work of a master and separates it from the rest of the crowd.

ATTENTION TO DETAILS

A great deal of concern is required to balance the functional and aesthetic considerations of any object. The functional needs may be one thing, where visually satisfying needs may be another. Although this is a difficult balance to achieve, any measure of imbalance should be geared more toward making the object do what it is intended to do rather than making it look more enticing. I am not suggesting that making ugly pots that work is more commendable than making beautiful pots that don't work. Rather, one should do everything in one's power to make the balance between form and function as equitable as possible.

Unless they are done for a special effect, oversize appendages and details of any kind — be they lids, spouts, knobs or handles — are usually visually destructive to the total aesthetic quality of the pot, and they don't necessarily help it to function. There is a right size for all appendages to work properly, both functionally and visually, on any object. However, achieving this balance and finding the right size

only comes with considerable experience coupled with astute observation. In this section, I am more concerned with the practical aspects in both the design and in the making, but I would like to make it clear that no matter how much attention is paid to the details, if the form or basic intention of the object is weak, the final object will be a dud. If the form is strong and satisfying, the attachment of weak details will likely also render this piece a dud. If both form and details are well related, the piece is likely to be good. If the form and details are good and the object functions as desired, it should be a winner.

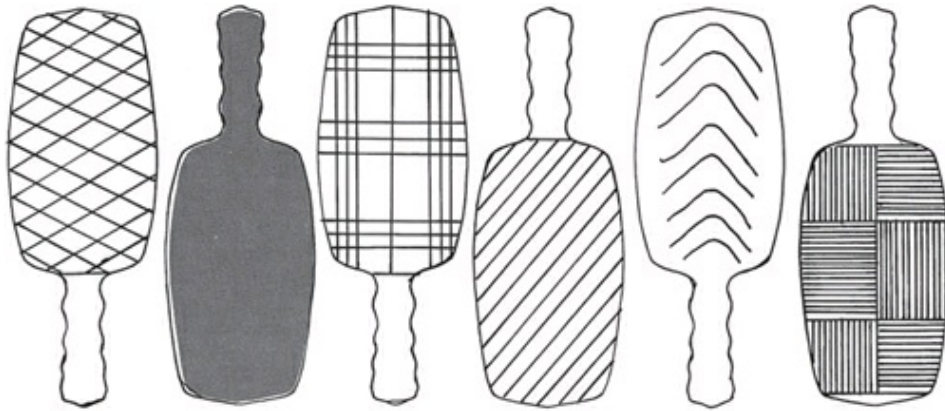


Simple forms that can easily be beaten from round thrown forms.

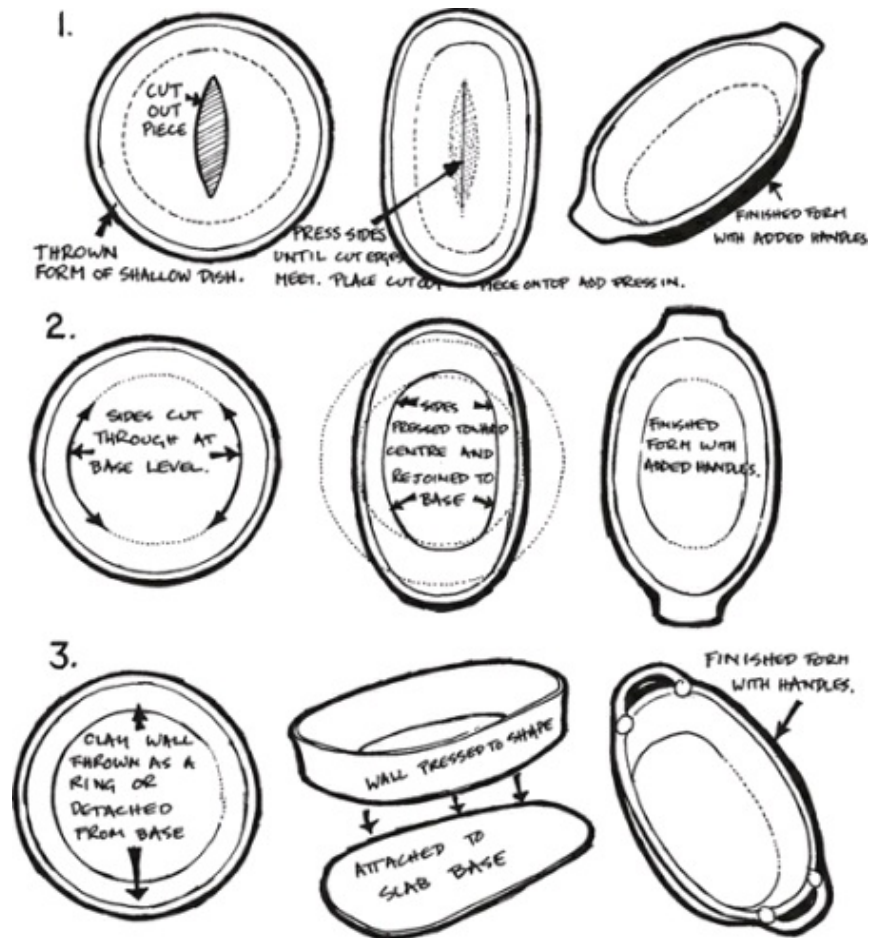
Unless a pot is a complete sphere or some other totally enclosed form, it will have a beginning and an end. In the usual method of anthropomorphic association, we normally name these parts lip or mouth and bottom or foot. In between, we are likely to find some or all of the following: neck, throat, collar, shoulder, belly and waist, depending on the form of the object. We talk about forms being masculine or feminine, their relative strength or sensuousness, and how they sit or stand. We also give them other human characteristics, sometimes calling them weak, mean, thin, slight, tight, loose, robust, rotund, vigorous, sensuous, virile, etc.

Simple thrown forms — meaning made in one piece — grow from the base upward, moving in a sometimes fluid line, often called feminine, or in a sometimes interrupted line with angular changes in direction, often called masculine. These

points of movement or change in linear profile from one part of a form to another are known as articulation. Pots may easily be altered into nonround forms by beating spheres or cones with paddles and finishing the shaping with Surform woodworker's planes. Wheel-thrown oval forms may be made in several ways.



A variety of wooden paddles with patterns cut into the surfaces.



Oval thrown forms, three variations.

For any piece of pottery to be aesthetically satisfying, the basic form has to be well considered. Here, I am mainly considering details — either the beginnings and ends of pots themselves or appendages, such as lids, spouts and handles. They are considered both in an analytical vein in how they function, and a more practical vein of how they are made and the relevant considerations in their production. There are a variety of ways to achieve the different ends employed in making pots on a wheel. There will undoubtedly be some omissions in the complexities of clay working, and individuals reading this book will almost certainly have their own variations to just about everything I might mention.

BASE TERMINATIONS: BOTTOMS & FEET

The foot is an important aesthetic and functional detail that is often made in ways that reflect the individual maker. It plays an integral part in the form of a pot, whether one views it as the beginning or the end of the piece.

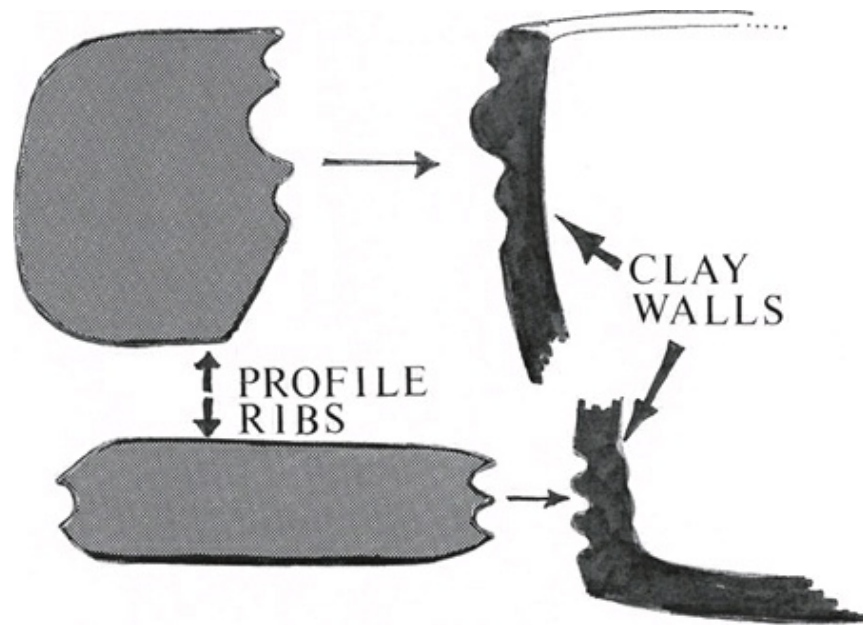
One tends to think of the bottom as the part of a form that is heavy, rotund and sat upon. Feet are the foundations from which a form grows and develops. Feet, in pots as in people, create the stability to stand properly. They can range from heavy, solid and earthbound (as in the military) to light, ethereal and dancing (as in ballet).

Decisions in the shape and size of feet demand aesthetic, structural and practical consideration. Are they on duty, or may they dance? Small feet reflect elegant, delicate and refined forms suited to contemplation and display. Large bottoms and feet suggest stolidity, stability and an ability to deal with the stresses and strains of daily family living.

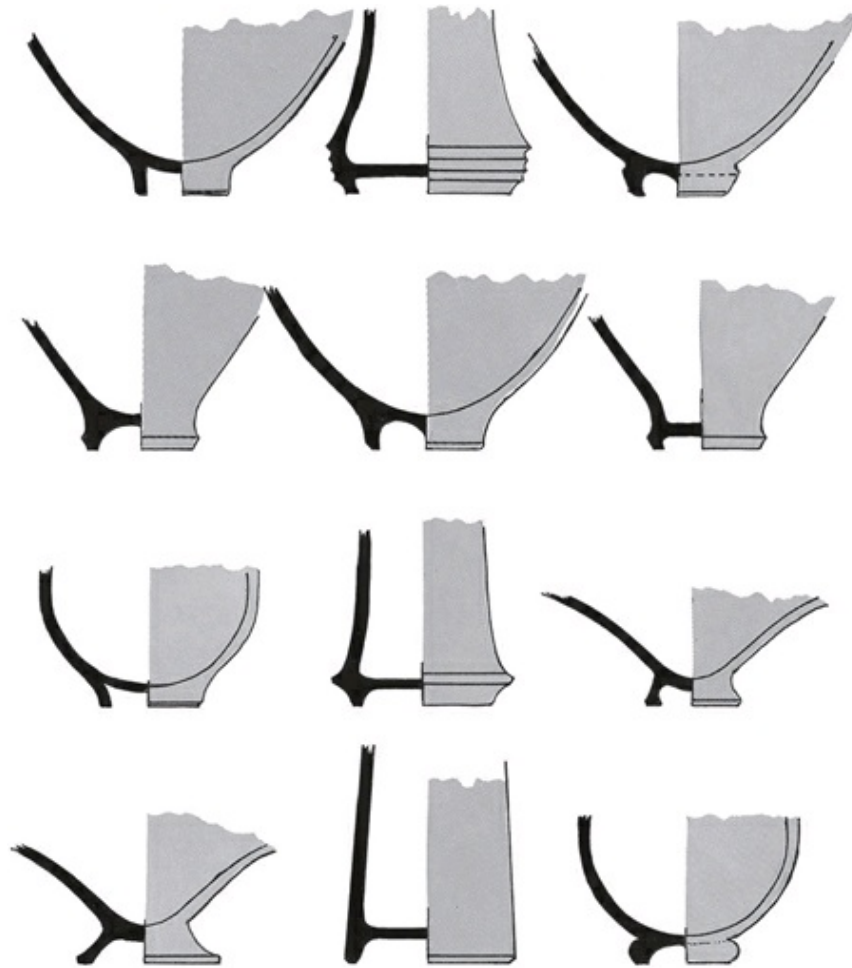
The relationship of foot size to the rest of the form, as well as to its efficiency as a stabilizer, is partially controlled by the use that will be made of the object. For instance, a small, elegant foot, well-suited to a purely decorative bowl, is unlikely to satisfy the needs of a soup bowl where stability on a flat surface is paramount, or where moving volumes of liquid make them vulnerable.

The foot is also important structurally, as it supports the object in the drying and firing processes. If it is made too narrow, it may well cause the pot to slump due to the weight above. If it is too wide, the inner part of the foot might sag and deform the interior. The outside of a form must relate to the inside, because cracking from uneven wall thickness might also develop. Practicality can refer both to the practical nature of the foot itself and the trimming of a shape that makes later gripping easier during the glazing process.

It is not always necessary to finish a piece with a trimmed, turned, applied or cut foot. Depending on what the object is to do, combined with the aesthetic considerations that go with that object, pots often are cut from the wheel with a wire and left with little or no further working. Profiles or ribs made from wood, metal or plastic can be used to give the bottom edge a range of interesting linear effects.



Profile ribs may be purchased ready-made or cut from wood, metal or plastic. For small ribs, old credit cards work well and may be cut with scissors. For large ribs, samples of Formica or Arborite sheet work well and may be cut with jigsaws, fret saws or files.



Variations in trimmed or turned feet.

Cleaning or softening of the bottom edge of a pot by rolling it on a hard surface or rubbing it with a moistened finger is often all that is needed to satisfy the needs of function. Slightly indenting the whole base by applying gentle pressure of the palm helps alleviate the problem of having the base warp into a convex, wobbly and unstable state, which is a recurrent problem with untrimmed bases. Adding small buttons of clay or modeled feet to wire-cut bases eliminates the need to indent the base.

Cutting wires of different types — including twine, monofilament fishing line, curtain wires or thin, stretched springs — can be used to create differing decorative effects. By using various forms of twisted wire, many variations of cuts can be made. The typical wire-cut effect is commonly found on untrimmed wares from Romano-Britain to modern peasant wares from Europe, although it is most associated with the Far East. A fine, twisted metal or cord cutting wire is pulled through the soft clay while the wheel slowly revolves to create a shell-like pattern.

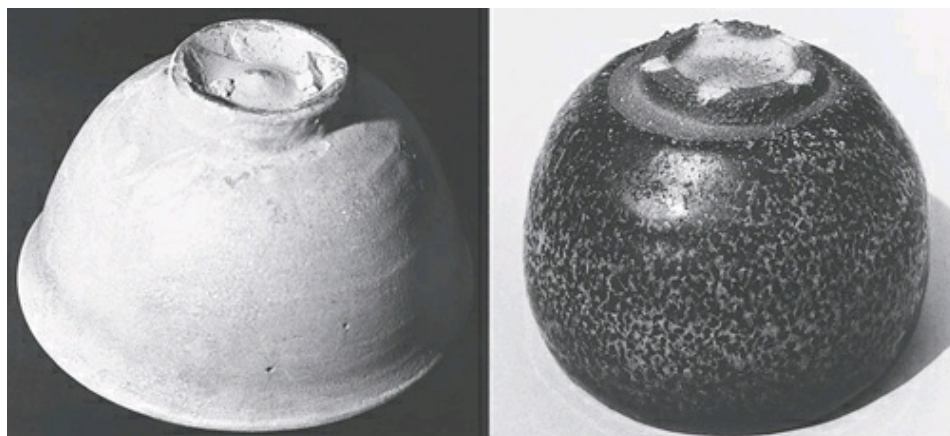
Patterned bases also may be made by pressing medium-soft clay on textured

surfaces, such as basket weave, burlap, lace or even corduroy fabrics. Textured bases, like most feet, are only noticed when the pot is lifted and the base exposed. As such, they can become an important decorative adjunct to the rest of the form.

In parts of the Orient, the first part of an object to receive the close scrutiny of collectors and users is often the foot. To connoisseurs, the foot tells a great deal about the person who made it, quite apart from it being the most usual place where a piece might be signed. The way a potter finishes the base is read like a signature, and knowledgeable people often are able to tell the identity of the maker from the foot alone. The suitability of the base is an important concern of the overall form, even though it is underneath the piece and seldom seen. Nevertheless, it needs careful consideration. Good houses need good foundations. So do pots!

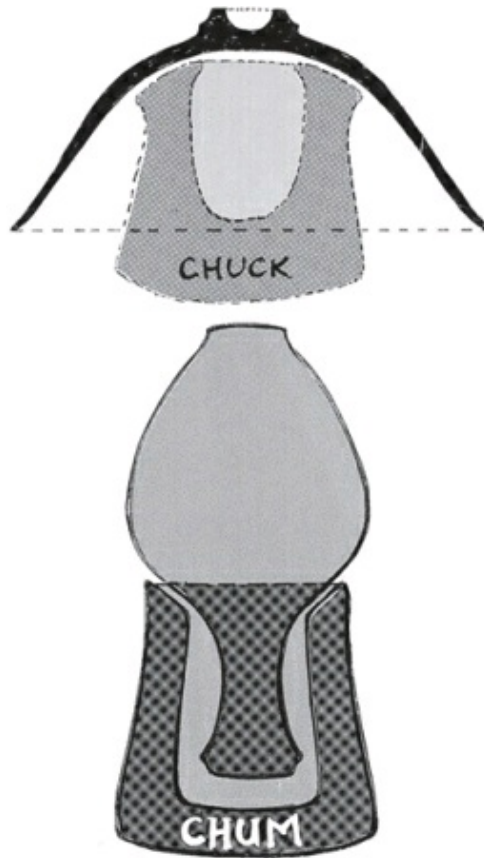


Shell-like pattern produced from cutting cord or wire.



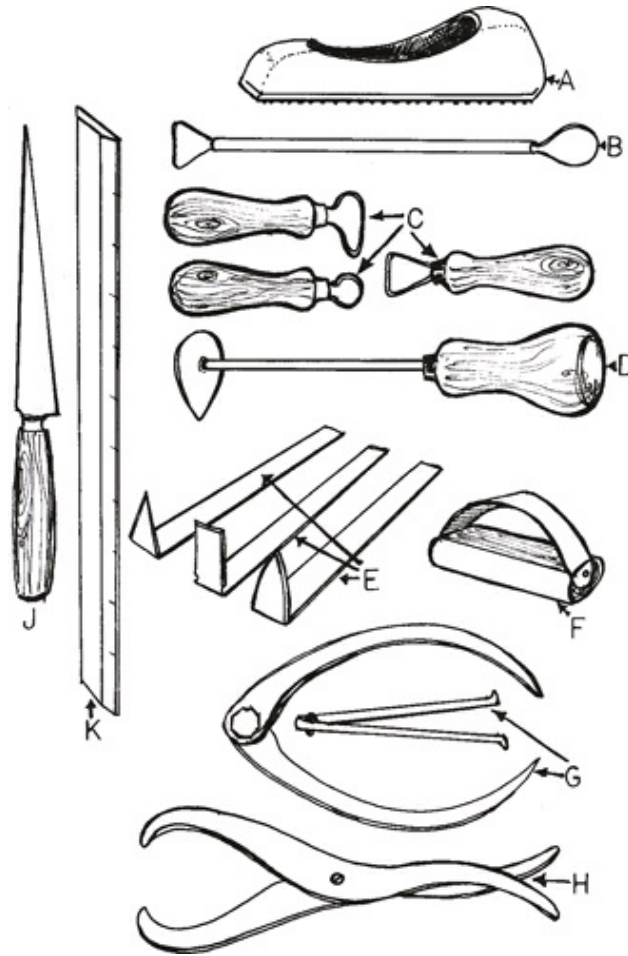
Trimmed feet on Korean (left) and Japanese tea bowls. Collection of the author.

Once a decision on the final desired form is made, the inverted piece can be centered on the wheelhead, over a chuck or in a chum for trimming or turning. The consistency of the clay at this point is critical. If too soft, it will deform; too hard, and it won't cut properly and may well crack in the process. The clay should be what is called leather-hard, a consistency similar to cheddar cheese in the way that it cuts, able to be pared away cleanly without clogging the tools or dragging on the surface of the clay. The clay should be evenly dried to the cheese or leather-hard state throughout the object for even trimming to take place. Unevenly thrown or dried, off-center pieces, or pieces being trimmed with blunt tools will all be harder to trim efficiently. Tools should be kept sharp to eliminate the likelihood of chattering, where the tool bounces on the clay, forming slight ridges and depressions and giving a corrugated effect. There may be times when this effect is desirable for a decorative treatment, as in a number of Oriental surface effects where chattering is encouraged by the use of extra-long and springy metal tools called kanna. This technique has the Japanese name kasuri-mon. For the most part, however, chattering is an annoying fault that can be easily rectified by sharpening the tools and possibly holding them a little tighter, in a different way, or at a different angle. Tools for trimming can be of several kinds, and their efficiency for different uses can only be felt by experience. The great majority of potters make their own tools, suited to their own needs or to the needs of the pieces being made.



Contour chucks and chums support objects at their most vulnerable points.

In trimming, the relationship between the shape of the inside to that of the outside is vital. Foot trimming for production work is most easily accomplished when the objects are placed on a chuck contoured to fit the inside of the object. Quick, efficient trimming of small numbers of low forms, such as bowls and plates, is often best done on the flat metal wheelhead. You won't need small dots or coils of clay to hold the pot in place during trimming if you dampen the wheelhead and the edge of the piece to be trimmed, then apply slight downward pressure once the piece is centered. This results in a clear view of the total exterior of the piece, and the slight pressure exudes a small amount of air from beneath, holding the object in place by means of a vacuum. If the trimming is done quickly, the vacuum will hold firm for several minutes, at least long enough to easily trim most forms. To break the vacuum and remove the piece, all that is needed is a light tap on the side. You may lose a few pieces in learning the exact dampness required and the right consistency of the clay, but this method of trimming saves a considerable amount of time with no compromise to the quality. Vacuum trimming is most useful for objects that are low and wide; taller, slimmer pieces can detach themselves from the wheel due to side and lifting pressures.



Tools used in throwing and trimming: A) Surform plane, a rasp for removing heavy excess of clay, particularly on altered forms; B) wire-ended modeling tool; C) metal loop tools; D) solid paint scraper for heavy work; E) flat strip metal tools; F) heavy-duty hand-grip tool for preliminary trimming of large forms; G) calipers; H) double-ended calipers; J) knife; and K) ruler.

After trimming, feet may be further adapted and altered by cutting or modeling. These practices can also be the basic way of foot development, as is often found in Japanese tea bowls where the entire foot is cut with a tool while the bowl is rotated in the hands. Feet also can be thrown with soft clay directly onto the trimmed leather-hard form, or they can be thrown separately and joined at the leather-hard stage.

Single feet are the most obvious and most used forms, although it is possible to make an infinite variety of feet in ways other than throwing. Thrown feet also can be made separately and added either individually or in multiples. The most common multiple foot is the tripod, which has been used throughout history. A tripod is a good, stable form if the legs are the same length and applied with the same angle and vertical thrust. The applications of feet in functional pottery discussed in this book refer mainly to the single foot, since it would be impossible

to cover every variation.

TOP TERMINATIONS: RIMS, MOUTHS, LIPS & EDGES

After the eye takes in the general form of any pot, the most quickly noticed detail is usually the lip, mouth or edge. Strangely, this is the part that so often betrays the potter, showing weakness by looking as though the clay ran out just before it got to where it was supposed to go. Lips and edges often have a starved or pinched look, which not only is aesthetically displeasing but also leaves the thin edge vulnerable to easy chipping and breakage.

If anything, edges of functional ware need to be slightly thicker than the rest of the piece. There are, of course, exceptions to this, such as in drinking vessels where extra thickness is uncomfortable, but in the main, edges should be strengthened. This is usually done by applying controlled downward pressure to the rim in a compressive action as one of the very last movements in the throwing stage. With some finely thrown clays, such as porcelain, late compression might lead to deformation of the form, so the answer here is to keep the edge fairly compressed throughout the throwing process.

The range of lip variations made possible by slight pressures and finger positions is great, and it is often a stimulating process for the developing potter to spend a good deal of time practicing them on simple cylindrical forms. Such continuous practice gives the basic discipline necessary to gain some mastery in the making of any pottery. A fine edge or a refined piece of pottery can often demand a more reverent approach by the user. It can, and perhaps should, affect the way the object is used.



Interiors of vessels designed for pouring liquids.

When making any vessel designed to pour liquids from the top edge of the basic form rather than through a spout, make sure that the inner surface of the form is very smooth for the top 2 or 3 inches. It is also preferable to create a sharp edge at the top of that inside surface. This ensures that when a pouring lip is pulled out from the basic form, the liquid has a sharp edge to pour over when the form is tilted. When the form is returned to its upright state, the sharpness of the edge ensures the flow is cut, which reduces the likelihood of dripping. Pots that pour are like miniature waterfalls, and those with sharp pouring edges normally function best. Extended pouring lips, which also can improve the pouring ability, can be made by pinching the clay to a thinner wall at the point determined to be the site of the lip. This is best done with pressure between thumb and forefinger; gently pull the clay up before attempting to pull it out from the form.



Pulling a spout: 1, 2 and 3) Pinching out the thickened rim to thin the edge; 4) Starting a pouring lip; 5) Sponging the curve of the lip; 6) Pulling the pouring lip; and 7) Easing out the throat to give good inner pouring surface.

Once the clay has been pulled up adequately, tease it out to complement the vessel and create a good throat to direct the liquid in its path. There are a number of other methods to form pouring lips. These will be explored in the Spouts section later in this chapter.

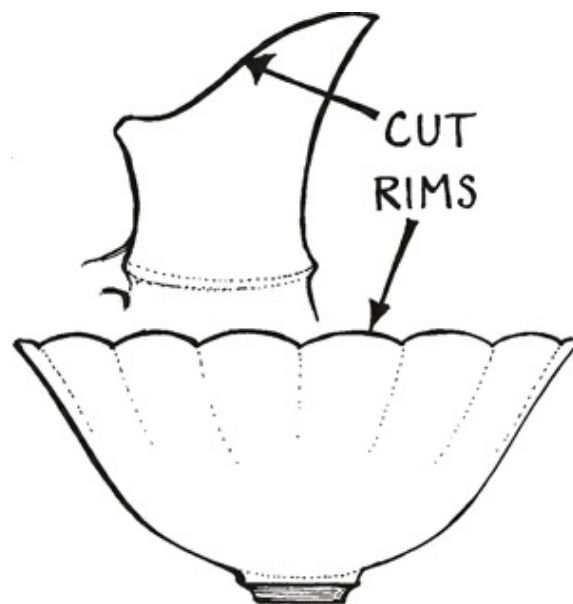
One form of top termination that is sometimes found (and could be much more developed than it has been) is that of cutting the tops of thrown forms. This method often is used for pitchers and jugs, but it could easily be incorporated in other ways. The clay is usually cut when leather-hard; it can be softened with a water mist, a damp sponge or by wrapping it with a wet cloth to re-form the shapes of the cut areas. The flat side of a knife can compress the newly cut areas, and any rough edges can easily be sponged to make them smooth.

A common form of top termination requires the seating for a lid or cover. For some lids, this will be a simple termination of the pot's wall. For others, it may be in the formation of an inner gallery or flange, or in a seating on the exterior below the pot's top edge. The latter may only need a variation in curvature of the form, combined with accurate lid measurement, to suffice. As a general rule in the making stages, the simpler top terminations require more complicated lid forms.

For pots with a gallery on the inside or a support form on the outside, the simpler lid forms are more often appropriate.

Make the inner gallery very carefully to avoid deforming the pot in the process of applying pressure at or near the termination point. The best way to make sure the form beneath the gallery remains strong is to put an embryonic gallery thickness in place fairly early on in the throwing process. This allows greater pressure to be applied later and ensures that there is, in fact, enough clay to make the flange. Running out of clay is a common fault in inadequately made lid seatings that results in a thin to almost-nonexistent flange. Should the lid also be badly made, there is a strong likelihood it will warp into the pot during firing due to a lack of support when the maturing clay is softened.

It is possible to use tools for the entire formation of the gallery or to do the main formation with the fingers, followed with a cleaning and finishing operation with a flat-edged tool, such as the end of a flat metal trimming tool. In order to avoid disturbing or deforming the lid seating, the actual finishing of the gallery should be almost the last thing done when throwing a form designed to take a lid. Only a little base trimming should follow. It is easy to push the form into an oval shape at this time, which makes proper lid fitting nearly impossible.



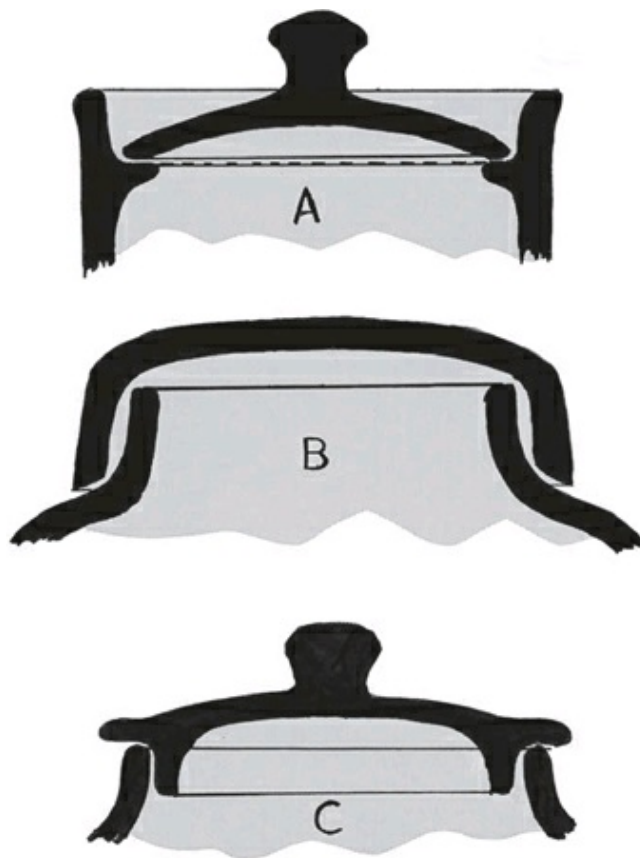
Cut rims.

LIDS AND COVERS

Lids and covers might seem to be the simplest part of the pots for which they are

made. Nothing could be further from the truth! They are perhaps the most demanding and frustrating of the pot's details to deal with, and, once again, they quickly show the degree of skill the potter may have.

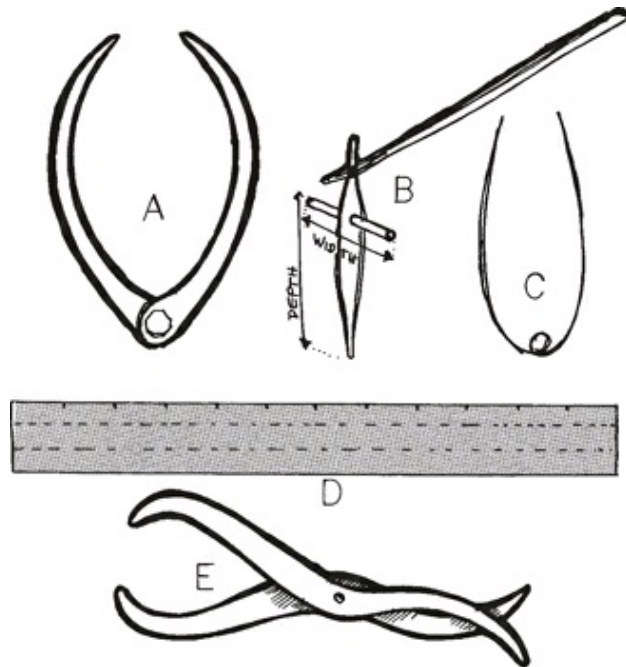
First, lids should fit properly. Second, each lid should be carefully related proportionately to the pot that carries it. Third, a lid should seem to belong to that piece by the extending fluidity of the line from the base through to the top, so that it doesn't look as incongruous as either an undersized hat on an elephant, or, alternatively, an oversized hat on a mouse. There are, of course, times when an extra-small or extralarge lid might be desirable for the form being made, usually for special effect or aesthetic concern. Fourth, a lid should fulfill the intended function; select the lid type that is most suitable for a specific use.



A) Top terminations with internal flange; B and C) Simple support for more complex lid fittings.

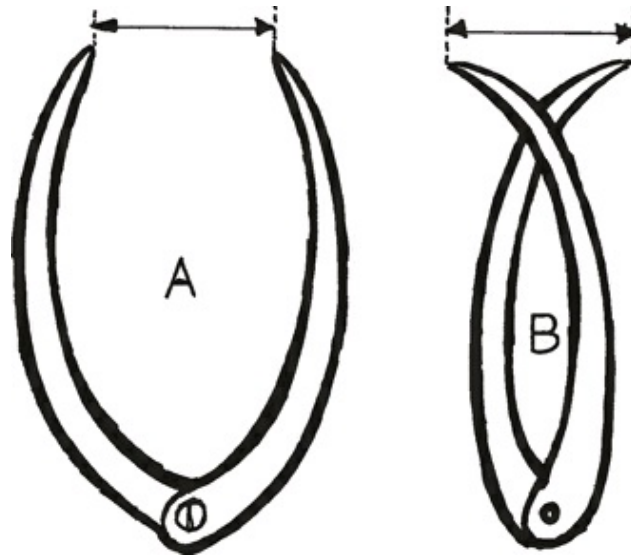
Lids fit on three different types of top terminations. Generally, simple terminations require more complicated lids, and more complex, galleried terminations receive simpler lids. No matter which combination is used, if the piece is intended to function, the lid should fit properly. Proper fitting is achieved by a combination of careful measurement and observation of what the lid has to fit

onto. Measurement can be done quite simply: Use a ruler; a piece of bent, stiff wire; a pair of simple calipers; or sophisticated, double-ended calipers that give the dimension of both inside the form and outside the lid. An Oriental T-shaped bamboo measure, called a tombo, can measure both width and depth at the same time, or, for some lids, use a measure attached to the wheel tray or surround. Simple calipers can either measure the gap between the points or across the closed caliper to the two points.



Tools used for taking lid measurements: A) calipers; B) Japanese “tombo” that measures width and depth of form at the same time; C) bent wire; D) ruler; and E) double-ended calipers to take inside and outside width at the same time.

No matter how one takes the measurement, the prime concern is that it is accurate. It takes far more time to try to rectify a bad fitting than it does to measure carefully and make it right in the first place.

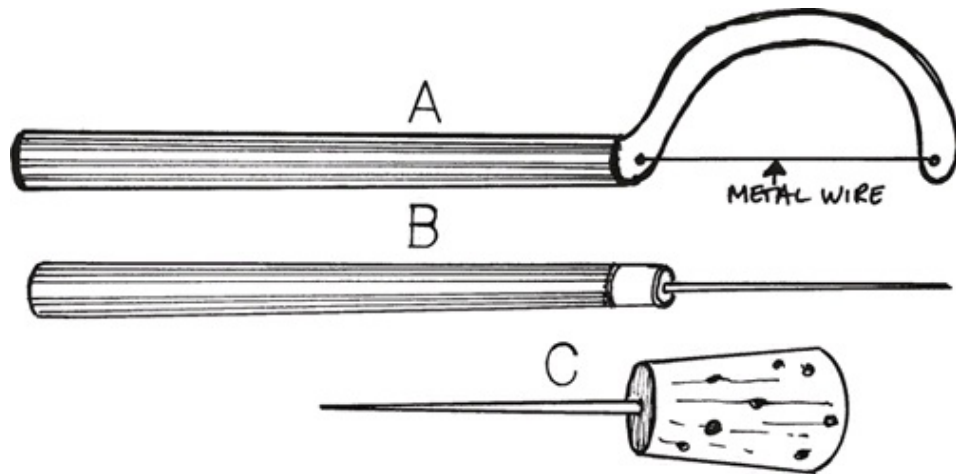


Caliper measurements may be taken across the gap for outside measure (A), or between points for an inside measure (B).

If a lid is required to fit onto a pot with an internal gallery and at the same time has a pulled pouring lip, the part of the gallery where the lip will be cut away should be done right after the piece is thrown to allow for easier pulling of the lip. After the gallery section is removed, the pouring lip can be pulled as normal; avoid deforming the rest of the top edge and gallery of the pot. Once the piece is stiffened, dry the lid on the form to help minimize potential warping.

There are some instances when lids may shrink more than the body of the pot. If this happens, it is usually due to the degree of stretching the clay undergoes during the throwing process compared with the stretching for the lid. Clay is formed from myriad microscopic platelets that slide over each other with water as the lubricant. In the process of throwing and stretching clay, the lubrication between platelets becomes extended, depending on the degree to which the clay has been pulled. There are only a certain number of platelets available in a given piece of clay; the excessive extending process of throwing will cause a small increase in the shrinkage due to the evaporation of water used to pull the clay to its extreme. In the drying stage, where the clay usually shrinks significantly, the platelets return again to close contact. This process has given rise to what is sometimes termed clay memory, or elastic or plastic memory. It is particularly prevalent in some clays and some forms, notably lids, necks and spouts (see Spouts). However, it is not a consistent problem. Different people throwing the same forms with the same clays will likely experience different degrees of change, depending on the speed and strength of the throwing. This is a difficulty of making that is relative to the

individual, and, therefore, it is up to the individual to accommodate it in his own work.



Tools for removing sections of flange or tops of forms: A) homemade tool with taut metal wire; B and C) pin or needle tools.

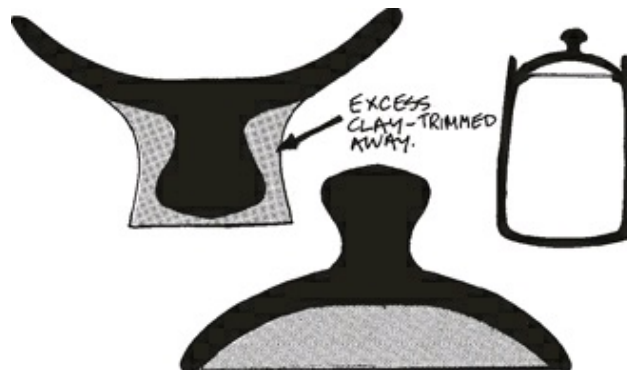
Trimming lids, like trimming feet, is accomplished by using a wide variety of tools. Lids needn't be trimmed on a wheel, although this might be the quickest way. They can be cut with different wires, wire-ended tools or knives to achieve variety. It is often wise to leave the edges of lids with a slight thickness to make them more resistant to the chipping and abrasion that occurs with the wear and tear of normal use.

BASIC LID TYPES

There are 11 different basic lid types, plus countless variations. Some lid varieties are made the right way up, more or less as they would appear when sitting on the pot. It is, of course, much easier to visualize the completed object in this way. Most, however, are made upside-down for accuracy and ease of measurement, and because some can't be thrown any other way. Once the required type of lid is chosen to suit the form and the relevant measurements taken, the piece is thrown. Some lids are easily thrown from a hump of clay; others with weighed-out amounts are thrown directly on the wheelhead or on a batt. The illustrations show the lids in section form, as they would usually be thrown and as they would probably be after trimming. Average weights for weighed-out lids are included in the list of Weights and Measures for production ware at the end of this chapter.

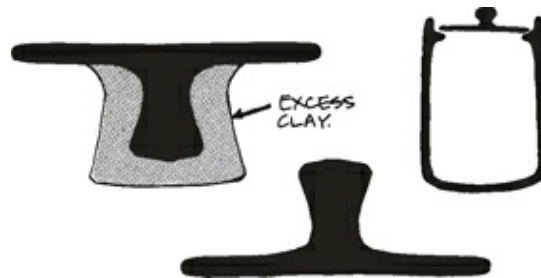
When one adds the variety of knobs, handles, and modeled finials that may be attached to this group of lid types, one realizes that this part of the pot alone allows infinite interpretations.

Lids Thrown Upside-Down



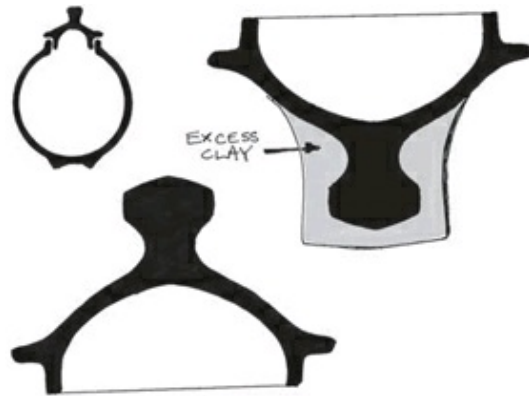
Lid Type 1

Lid Type 1 is one of the simplest lids, usually thrown off the hump and made like a small, shallow bowl sitting on a short stalk. The stalk should have enough height and volume of clay to allow later trimming of the knob. It needs to sit on a gallery inside the pot.



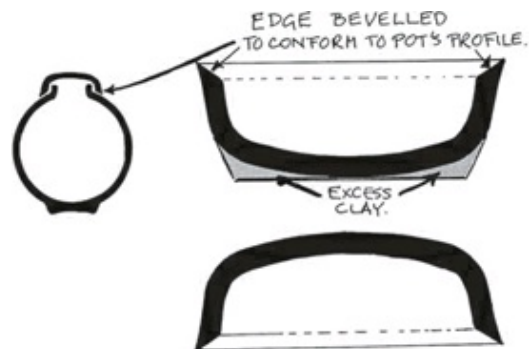
Lid Type 2

Lid Type 2 is thrown in the same way as Type 1, except that it is pulled out as a flat disc in order to make a flat lid. This lid also has to sit on a gallery. Depending on its size, it might be more difficult to make than Type 1 because of the difficulty of maintaining a flat disc unsupported on a horizontal plane.



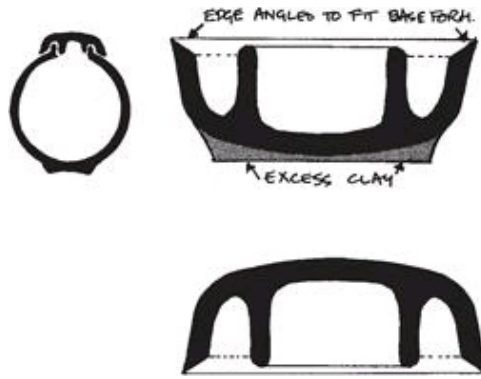
Lid Type 3

Lid Type 3 is probably the most commonly seen. It is made with a flange, and therefore doesn't necessarily need a gallery on the pot. It can be thrown off the hump with enough excess clay for a knob to be trimmed, or it may be thrown on a batt with weighed-out clay. For larger lids, the latter is probably the best method. This lid type is useful for most lid applications. In sizes larger than 6 inches diameter, it is probably best to throw a knob on after trimming has been done.



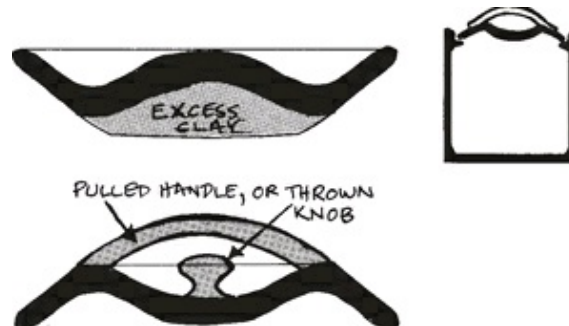
Lid Type 4

Lid Type 4 is like those used on Chinese ginger jars. This lid is best thrown on a batt; it is difficult to lift it cleanly from a hump. It is thrown like a small bowl, usually with short, straight sides. It has to fit over the top of a pot or into a recessed gallery to make sure that it doesn't fall off. Angling the inside top edge to the reciprocal angle of the top of the pot helps to give a clean profile to the finished object.



Lid Type 5

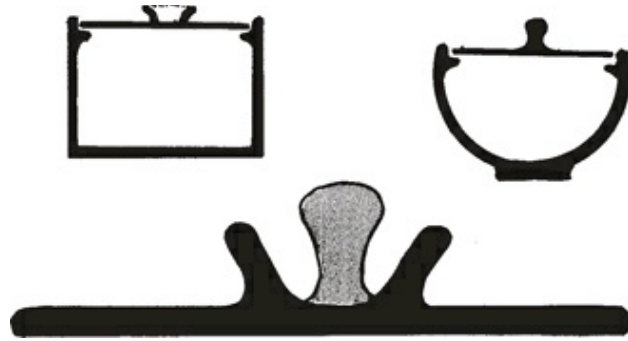
Lid Type 5 is a more complicated version of Type 4. This double-walled piece requires two sets of measurements to fit properly. The top termination of the pot fits between the two walls of the lid. It is used to seal in either the aroma or moisture of the pot's contents. It is also best made with an angled edge on the outside wall to fit the shoulder of the pot.



Lid Type 6

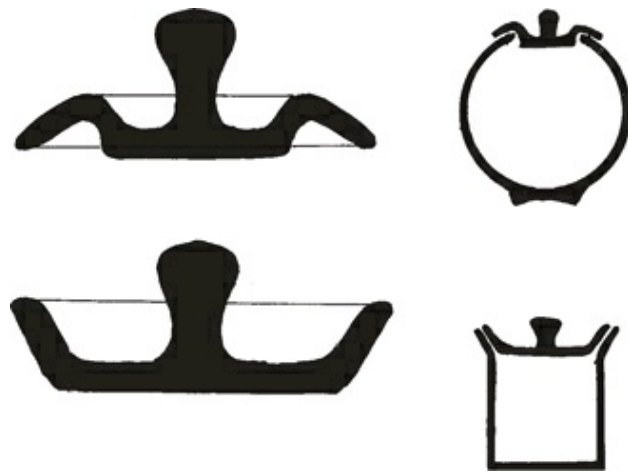
Lid Type 6 is made like a small, shallow bowl thrown with a flattened dome in the center. It is best thrown on a batt with weighed-out clay. In trimming, the dome is hollowed out to leave a recess that can be bridged with a pulled handle or decorative recessed knob. It usually fits on an internal gallery.

Lids Thrown Right-Side Up



Lid Type 7

To make Lid Type 7, large lids similar to the finished Lid Type 2, the simplest way is to throw a flat disc on a batt, measured to fit, and leave enough clay in the center to throw a knob if desired. It is basically finished in one operation, save for a little cleaning up when the lid is leather-hard.



Lid Type 8

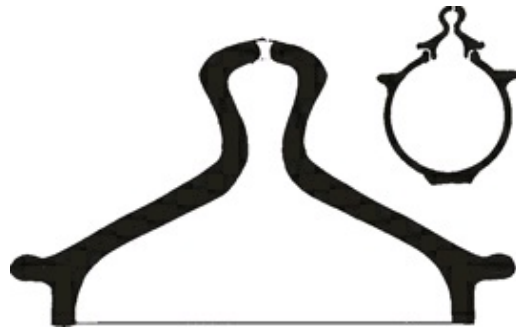
Lid Type 8 is perhaps the fastest lid to make. It can be done off the hump or with weighedout clay. It has its own built-in flange, so it fits onto the simple pot termination. After centering the lid, form the knob first, then pull up a small cylinder around it. Measure the outside width of the cylinder to fit the opening of the pot. Once accurate, bend the top half-inch or so to conform to the top of the pot. It generally needs a little cleaning to finish it. A common variation of Lid Type 8 is one where the walls of the lid are only pressed out at a slight angle to conform to the inside of the pot's top section, which is similarly angled. In this way, the lid forms a friction fit, rather like a wedge. This fitting is often used on storage jars or

kitchen containers.



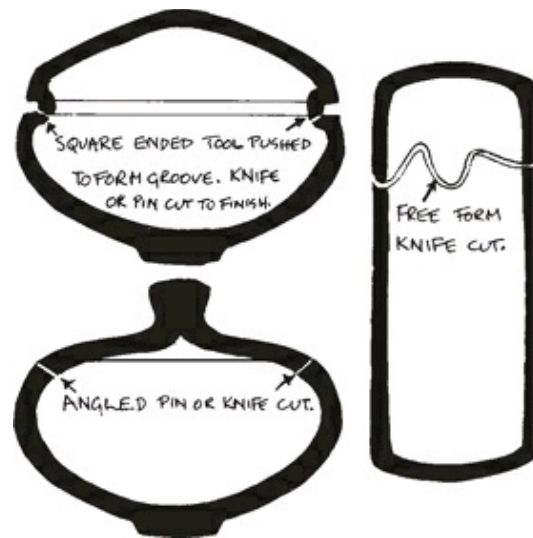
Lid Type 9

Another lid that is thrown off the hump is Lid Type 9. In process, it looks a little like a mushroom. After centering, the lump of clay is pressed into two directions. One becomes the knob, and the other becomes a flange that is initially pulled out straight. When the knob is finished, it is pulled to its full measured width and either left flat or curved down. When leather-hard, it is inverted on the pot or a small chuck and the “stalk” of the mushroom is trimmed away.



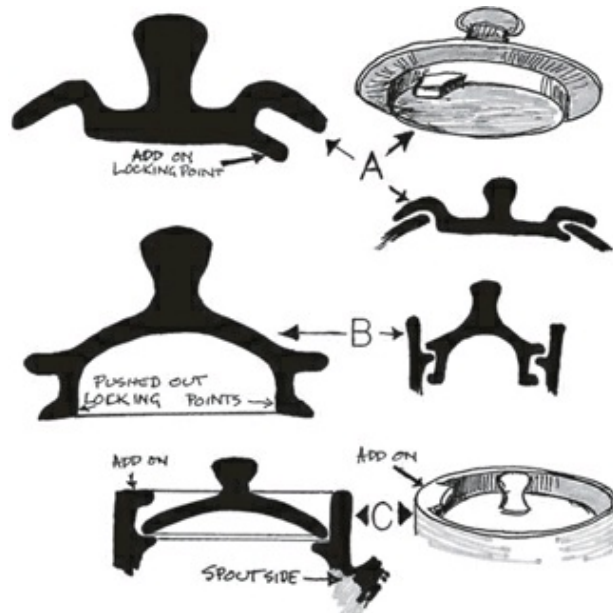
Lid Type 10

Lid Type 10 is very tricky to throw, but it is quite useful for certain objects. It is often used on large crocks or places where a hollow lid might be beneficial. It is thrown as a shaped pot by establishing the necessary width first, then collaring or narrowing the top to the form required. The lid is usually trimmed to fit the opening by inverting it on the top of the pot. It can either fit a gallery or a simple termination. Hollow lids also can be made by cutting a hole through the center of a solid knob or by using Lid Type 3, throwing a small hollow knob onto the trimmed form and boring a hole through afterward.



Lid Type 11

Lid Type 11 is an example of how a pot and lid are thrown as a complete, enclosed form. When the throwing is finished, a small, straight-edged tool is pressed against the rotating pot to form an indentation almost the thickness of the clay wall. When the clay has stiffened to leather-hard stage, a needle tool, scalpel or sharp knife is used to cut the narrow joining part. A small amount of trimming is usually necessary to clean up the edges and get a good fit. Many variations of this form can be made, with a wavy line cut at an angle replacing the tool indentation. This form of cutting should be done when the piece is leather-hard and deformation is less likely. With any of these forms, it is necessary to make a small pinprick somewhere in the form to allow air to escape while drying to leatherhard takes place; otherwise, the piece will crack or deform at the weakest point.



Locking Lids

If lids are made properly and are made to fit, rarely will they fall off or into the pot. However, there are some occasions when locking devices may be incorporated into the design of a lid, form, or both, so the lid can't easily be knocked off. Most lids can be made to lock by adding a small tongue of clay at a point where it will inhibit movement.

SPOUTS

Spouts may be press-molded, slipcast, pinched, coiled, slab-built or thrown. There are some practical advantages to making spouts by ways other than throwing. These are mainly in the consistent quality of the finished article — producing spouts that are unlikely to twist in the firing stages and that have multiple curves.



Swan or gooseneck spout with multiple curves.

The main uses of spouts are in lidded jugs, coffeepots, teapots, pitchers and a few other items. The main consideration in their function is that they pour properly, preferably in an even flow, without dripping or clogging. As with pouring lips, the sharpness of the edge is an important factor in whether spouts function well. As long as the final edge that the liquid has to go over is sharp, the flow should cut off without dripping. The edges of spouts that are rounded are almost always prone to dripping. Many potters clean the glaze off the very end of the spout to assist in the flow-cutting action. There is no foolproof way to make spouts that don't drip. Various factors come into play, such as length, angle of attachment, width of aperture and complexity of curves. Sharp edges, good angles and the smoothness of the inside of the spout assist in clean flow.

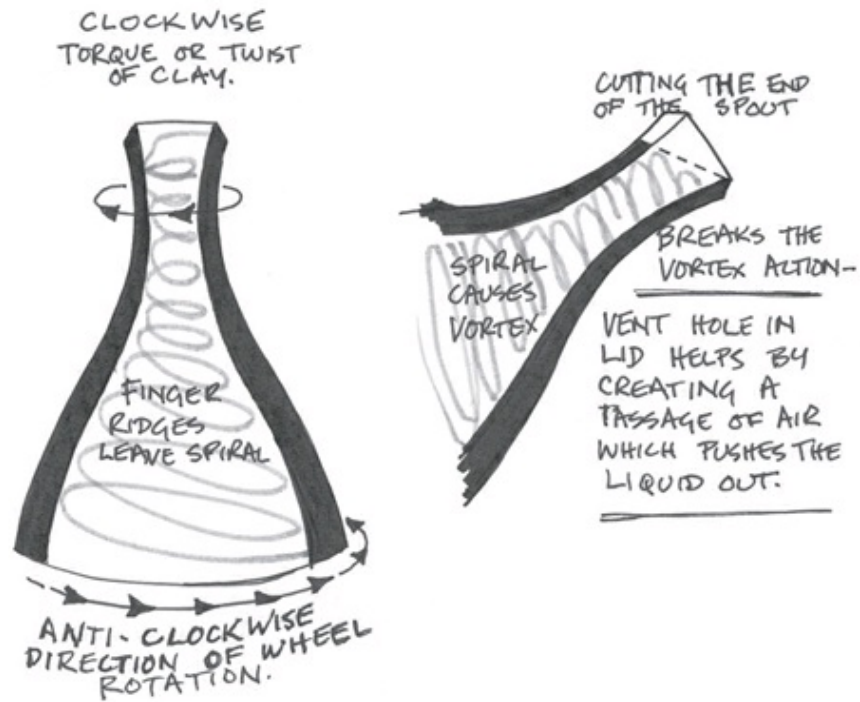
THROWN SPOUTS

Spouts are usually thrown off the hump, as it is easier to get one's hands around a larger piece of clay. A spout is made like a funnel, except the fat end is at the bottom. In the process of throwing, the clay usually is constricted into a small, tight form with a narrow aperture in the middle. It is important to remember what sort of

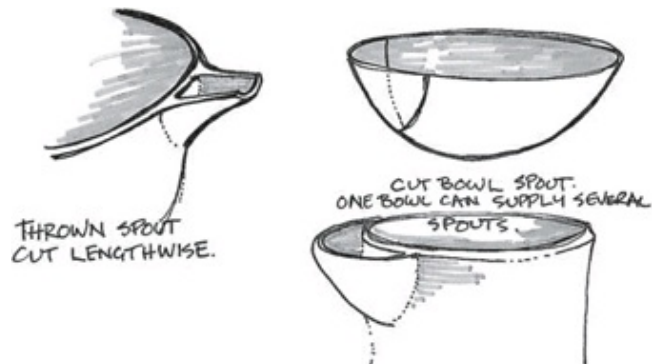
liquids may be flowing through the spout. Liquids may be any variation in viscosity, from as thin as water to as thick as batter. If the aperture is too tight, it may become clogged by viscous liquids.

Thrown spouts often have a tendency to twist during drying or firing due to the phenomenon commonly known as elastic memory. If the clay is compressed into a small space while spinning, the alignment of clay particles is stretched as the torque of the clay goes in the opposite direction to the rotation of the wheel. The tension put into the movement often continues the direction during the drying and firing stages. This creates an annoying problem if the end of the spout is cut, as the cut end is sometimes twisted to the point where it is almost impossible to pour the liquid cleanly. One solution is to create a narrow spout and not cut the end. With a narrow spout, more pressure is able to build inside the pot, which can then result in a clean flow. With a larger-aperture spout, a cut end aids in the pouring action, allowing a passage of air from the lid vent to the pouring edge. For a clean flow, it is often best to smooth the inside of the spout during throwing, which can eliminate the vortex action of the liquid that would otherwise be caught up in the throwing ridges inside of the spout, making the liquid pour from the spout in a spiraling movement. The problem of the twisting spout is an individual one; it only can be corrected by the individual through observation and experience. As with lids that sometimes shrink excessively, the torque developed in the same clay and used for the same forms often varies considerably from one thrower to another. It will also vary with different clays thrown by the same thrower. If the problem is a consistent one, the usual solution is to apply the cut end of the spout at an angle slightly down to the left as one looks at it end on.

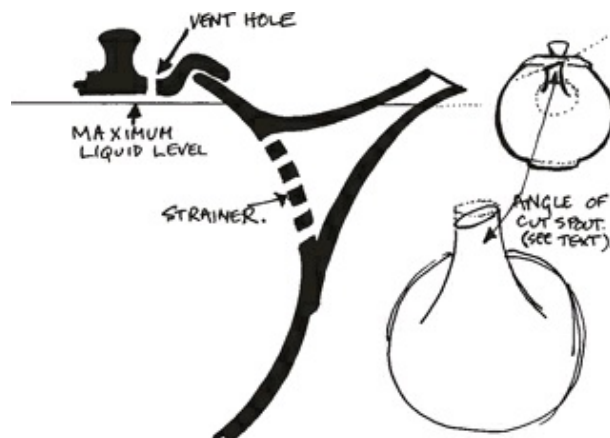
It generally takes some time to gauge the right degree of slant, and it is never totally foolproof. Spouts also may be made from ordinary thrown spouts cut in half lengthwise or from sections cut from bowl-like forms and applied to the outside lip of the main form. Both of these spouts should perform well, particularly for thicker and more viscous liquids.



The torque or twisting action of clay in spouts.



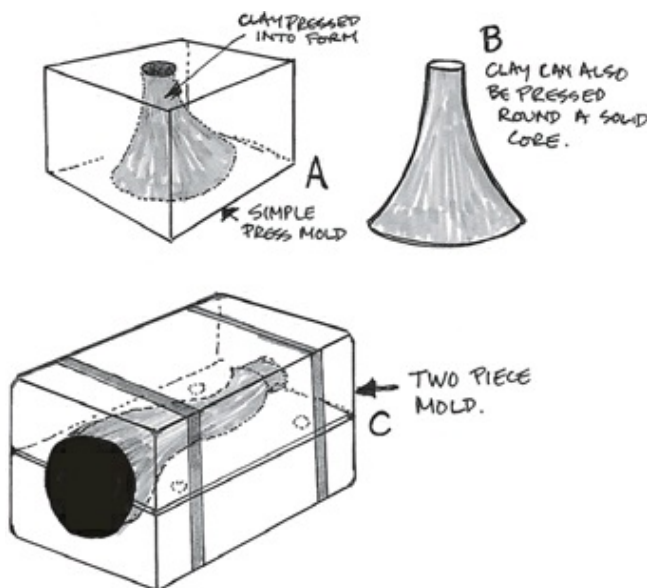
Thrown and cut spouts.



The placement of spouts and angle of cut.

PRESS-MOLDED AND SLIPCAST SPOUTS

Many potters use the processes of pressmolding and slipcasting to eliminate the aggravating habit of spout twisting. Casting, particularly, can be extremely useful in making spouts either in shapes unsuitable for the wheel or for those needed in quantity. Press-molding is a slower process, but it can be very useful for asymmetrical shapes unsuitable for wheel making. In either case, plaster or bisque molds need to be made from a model. Molds for pressmolding can be less carefully prepared than those for casting, since press-molding doesn't pick up as much detail, and imperfections can be cleaned up later. Molds for casting need to be more carefully made to cast properly, and because the liquid slip shows every mark. A well-finished model saves a lot of clean-up time to remove unwanted seam lines and marks.

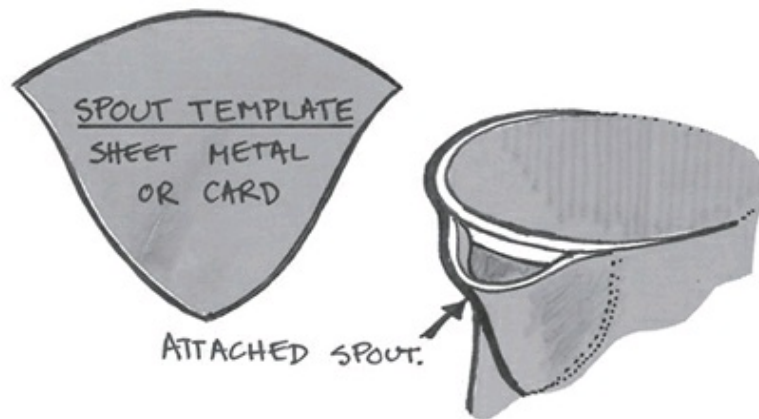


Simple spout molds.

Both casting and press-molding are good alternatives to throwing for spouts, particularly where nonround or modeled spouts are required. Since there is no throwing required, there is no problem with twisting or other distortion. Although sometimes questionable from an aesthetic viewpoint, spouts often are made by either slab or coil methods. It is extremely difficult to effect a happy marriage of thrown body with hand-built additions. If hand-built spouts are preferred, it is often a good idea to make small templates so the slabs may be cut with ease and

accuracy for rolling and sticking.

A small cone made of plaster, fired clay or a tapered wood dowel can be useful to wrap the spout around so that some pressure can be applied to stick the ends together. Another method consists of pinching a small ball of clay flat to create an oval lip or overlapping spout. No matter how one makes the spout, its need to function properly remains the same; keep in mind the hints given earlier for clean pouring.



Template model for hand-built spout and its placement.

KNOBS AND FINIALS



Dual-purpose lid-plate.

The knob or finial (finishing point of a lid) is the point in the form where the potter has great license for play to give a flourish to the top termination of the piece. Likewise, the lugs and handles required to function properly also may be an avenue for freedom and inventiveness. They are all points of definition where the attention of the viewer is likely to be caught and sometimes captivated. Sometimes, the knob is used to make or show some kind of sculptural statement that is of greater importance and artistic concern than of function. A small knob on a large

form emphasizes its monumentality. A knob may be trimmed from existing clay or from softened pieces of clay added and thrown onto the leather-hard lid. Functional knobs should be able to be picked up easily, even when they are greasy or hot from kitchen use.

HANDLES



Pitchers with excessive handles.

The word handle suggests something that is to fit, or at least be used, in the hand. This seems to be an element often forgotten by people making pots, where little consideration is given to how the handle is related to the natural shape of the hand. Different people find different types of handles comfortable to hold based on whether the handles fit their hands. There are many different ways to hold pots, and the same type of handle won't always suit everyone who may wish to use the object. There also are different wrist actions used, from that of pouring from a pitcher to that of tipping a cup for drinking. As long as the potter is aware of the principles behind these variations, it becomes easier to accommodate them in the work.

Aesthetic and practical questions of the relative size and flow of the handle in relation to the pot are, to some extent, resolved by the intended use of the object. The use of an extra-large handle on a large form, such as a pitcher, tends to diminish the visual impact that a smaller, hand-sized handle would give. One often sees handles that fly out from pots, exaggerated in size and unrelated to form or function. For lifting and pouring hot liquid, for instance, the space actually needed between the knuckles of the user and the body of the pot is no more than $\frac{1}{2}$ cm. Even when the object is at its hottest, the small airspace from knuckles to pot acts as an adequate insulator from the heat. A large, flowing handle generally gives a sense of insecurity when pouring liquids, since it is much easier for the slopping

movement of liquid inside to disturb the balance of the pouring action.

Handles are difficult things to make well, and they are particularly challenging to fit to the variety of forms that may call for them. As with knobs, there are many ways they can be made. They can be thrown, pulled, wire-cut, pinched, coiled, coiled and braided, slabbed, extruded, press-molded or slipcast. For many forms, they may also be made from other materials such as bamboo, rattan, wood, metal, leather, bone or many materials in combination. Deciding which method of handle-making is best or which material might be used for any one piece is a very personal choice that comes from a combination of aesthetics and experience. A badly made handle is a detrimental detail to any pot, as it is the one part of that pot that is continually in contact with the hand of the user. If the handle feels inadequate, it will be a constant reminder of its inadequacies. Other details don't have such an intimacy about them except, perhaps, for knobs on lids and lips on vessels we drink from. It is hard to feel any joy in using something that is continually uncomfortable, and holding hands with either a flaccid or bony, pinched handle can quickly quench the desire for further contact.

Another problem encountered in making pots with handles lies in the decision of where to place the handle. In the design of forms that require a handle, the shape should be considered from the outset — not as an afterthought. Whether one makes an articulation change in the form or simply makes a groove or raised, linear emphasis, that emphasis is best placed where it marks a suitable point for handle attachment. The placement of a handle should be at the point where the maximum efficiency in use is found, or where, because of the shape, efficient leverage is found.

ATTACHING HANDLES

Handles, and indeed any additions, may be attached to the basic form by various methods. What usually happens is that the basic form is scored with the point of a knife, an old fork or similar sharp tool at the points where the handle or other attachment is to be fixed. The area is then dampened with water or slip made from the same clay, and the attachment is firmly pressed into place. Some potters don't bother to roughen the surface, but it usually does help to gain a secure fastening of one piece of clay to another. Some clays stick together easily, with little or no scoring, slip or water, and some require a lot before they will stick without cracking off. Only firsthand experience with any given clay will tell you what that particular clay requires.

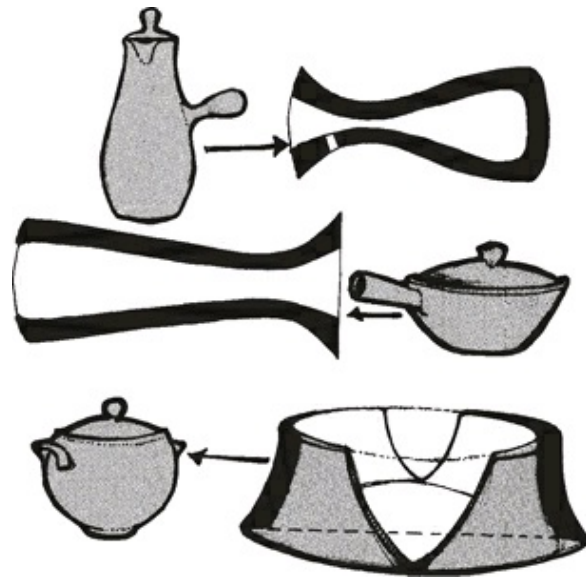
It is important that the ends of handles carefully and effectively adhere to the

vessel, and here is yet another point for inventiveness by the potter. Handles can be pressed into place, leaving finger or thumb marks; they can be smoothed into the form, leaving no marks; or they can be pressed with stamps or seals, or have sprigs or other modeled details attached.

Once you decide what the handle is to look like, how it is to be made and where and how it is to fit, the next stage is to make it.

THROWN HANDLES

Thrown handles are mainly used as attachments on side-handled casseroles, some soup bowls, Oriental sauce pots, teapots and coffee pots. They can also be made as a circular form, which may be used as lugs. When full of liquid, larger pots require a strong wrist to lift and pour, so the thrown side-handle is generally used on smaller pieces. They also may have a small lug on the opposite side. Thrown handles should be shaped with the inner shape of the half-closed hand in mind to make gripping easier, either as a tapering tube, or a contoured tube.



Thrown handles.

If the end of the handle can be completely sealed, it saves the annoyance of filling with water during washing. A small pinhole underneath to allow steam to escape ensures that the handle won't explode during firing. In use, this small hole will allow any water to drain out. The lower end of the handle is cut to fit the contour of the pot, then attached.

PULLED HANDLES



Pulling and attaching handles: 1 and 2) Scoring the surface for handle placement; 3 and 4) Attaching the partially pulled handle; 5) Pulling the handle from the pot; 6) Creating the center groove; 7 and 8) Attaching the lower end.

Pulled handles are probably the most widely employed type used by potters. They are quick and efficient, and, when done well, are a joy to make, hold and look at.

Pulling is done by gently applying pressure and water or slip for lubrication to a pear-shaped piece of clay, then pulling it from the narrow end into a long, tapering sausage. Depending on the required size of the handle, the clay can be cut or torn from the basic clay lump, trimmed of any excess and applied to the pot. If the clay is too soft, the freshly applied handle may tend to droop. This is usually rectified by placing the pieces upside-down until they have stiffened. Once the clay has stiffened slightly, adjustments to its form can easily be made by exerting slight pressure wherever needed.

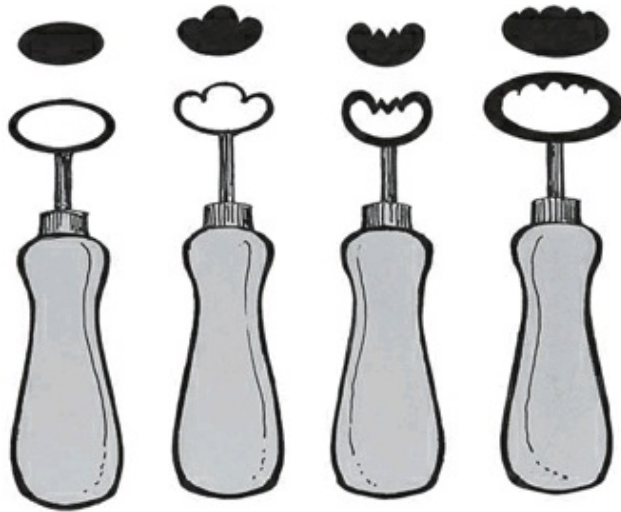
The way the hands and fingers are manipulated will make wide variety in the cross-section. Different placements of the thumb or first two fingers can form

ridges or grooves down the length of the handle. Some people prefer to attach pieces of clay or partially pulled sections of handle directly onto the pot and then pull that into the finished handle form. Others prefer to pull the handles separately from the object. After the handles are pulled, they are formed into the required curve and laid on a smooth, flat surface to stiffen before being attached. When they have stiffened sufficiently, the handles are trimmed to fit, then attached. From my experience, there seems to be no particular benefit to any one method, except perhaps that a handle pulled directly from the pot may be a little more integrated with the form than one pulled separately and then attached.

The quality of a good handle of any scale is in its invitation to be held. A good pulled handle usually has a form that tapers slightly from the top end to the middle and thickens again slightly at the bottom. The tapering effect is found in both its thickness and its width and conforms to the normal thickness variations of the fingers, where the first and baby fingers are usually slimmer than the middle two. Some potters prefer to make the heavier attachment at the lower end on such forms as pitchers and mugs, pulling toward the top and thinning at the upper end. For comfort in use, the inner surface should be convex rather than concave. It should seem to grow out of the form rather than being merely stuck on, giving the feeling that the form would be incomplete without its presence. There should be a satisfying and related negative space between the handle and the form of the pot, a fluidity of curve and strength at the joins. Above all, it needs to feel good to hold and have a built-in sense of security.

On forms that might be excessively weighty in use, a thumb-stop is often used. This is usually a small piece of clay, either a compressed ball or pre-formed, wedge-shaped piece. It is attached to the handle at a point where its incorporation will help the user get a better grip. They are particularly useful on larger pots, such as pitchers and teapots, but largely redundant on small objects, such as mugs, except as a decorative detail.

WIRE-CUT HANDLES



Tools for wire-cut handles and cross-sections of shaped handles.

Creating wire-cut handles is done using shaped, wire-ended tools. The shape of the aperture in the wire is what makes the crosssection of the handle. Handles made in this way are even in section throughout their length.

The process is done by cutting through a block of clay, with the tool either held upright or at an angle, as long as the angle of cut is constant. After cutting, the length of contoured clay is lifted from the block and curved as desired. It is better to let the handle strips stiffen slightly before attachment, particularly if the contour shaping is complex, with ridges. When the clay has stiffened, the handle is cut to fit and attached to the pot. Use a sponge to smooth off any ragged edges along the ridges at the time you attach the handle.

COILED HANDLES

Coils, or rolled sausages of clay, also can make interesting handles. They can be rolled with an even thickness throughout their length or with variations in thickness built in, either by accident or by design.

The process is simply done by rolling the clay between the hands and a solid surface until the desired thickness is achieved. Short lengths of overthick clay can be cut off and further rolled to thin out certain sections, such as the middle or the ends. When the handle is formed, it is often left to stiffen before being applied to the base form. Coiled handles can easily be modified using short lengths of wood, either longitudinally or across the length, to produce a concertinalike effect.



Modifying coiled handles to create added interest.

PINCHED HANDLES

The total freedom of expression in hand-building techniques gives rise to many variations in handle making. Freely shaped handles can easily be pinched, either from the basic form itself or from small balls of clay. When formed into suitable handles, they can be attached in the usual way.

SLABBED HANDLES

The slab allows all manner of possibilities in handle making, from the hard architectural aspects suggested by stiff clay to the malleable, pillow-like possibilities of soft clay. Different degrees in the dryness of the clay offer a wealth of potential.

PRESS-MOLDED HANDLES

The basic method of making press-molds was explained earlier in this section, as related to spouts. They are quite simple to make and particularly useful for handles that might have simple modeling included in the design.

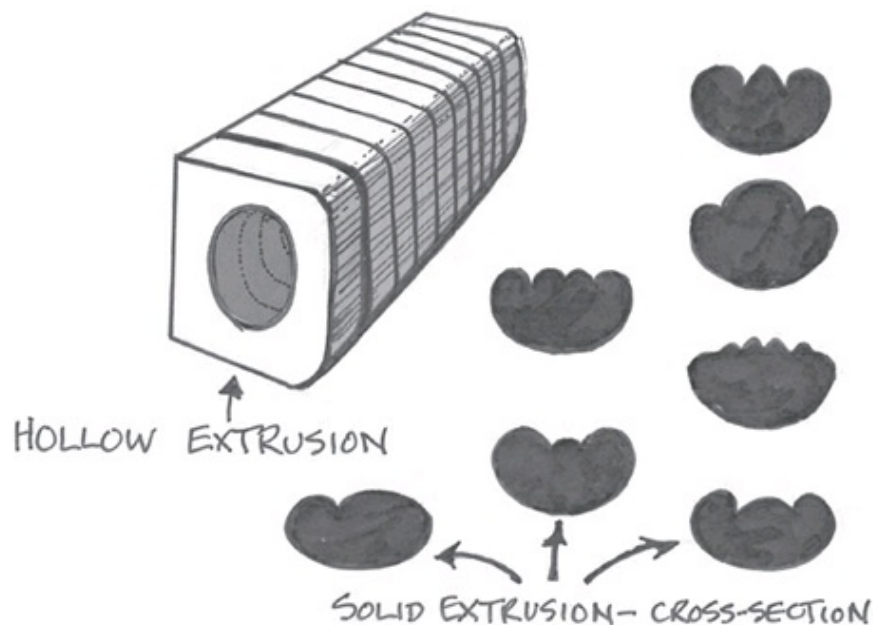
Molded impressions make it possible for numerous copies to be made of an original and thus cut down on the time required for each one. Press-molding is limited to fairly simple impressions, but does allow considerable freedom for

expression in repetitive work.

COILED AND BRAIDED HANDLES

Once rolled, coils can be joined together and braided or plaited in a variety of ways. Two-, three-, or five-strand clay coil braiding can be done in exactly the same way as with hair, cord or rope. Any more than five strands will become very difficult to control.

To do braiding without too much difficulty, the clay should be reasonably soft and in long enough lengths to allow interlacing. The clay is braided without the use of slip. If it should seem necessary to use slip to fill gaps or to stick coils together, this is best done with a brush after the handle is attached. Braided coils may be flattened by a light pressure from the hand or with a rolling pin. This not only flattens them, but it can make extremely interesting free patterns develop from the intertwined coils.



Extruded shapes used for handles.

SLIPCAST HANDLES

Slipcasting also was discussed earlier in the section on spouts. Cast handles can be made in single molds, or in battery molds when a number are needed. Battery molds usually make 12 to 18 handles at a single pouring of slip; consequently they save much time. The technique is basically an industrial one, although it can easily be put to good use by the studio potter.

Depending on the skill of the mold maker, almost any form of handle can be made by slipcasting. Extremely detailed forms might need complex molds. In volume production, the use of slipcasting can offer a viable alternative, because it can be done with semi-skilled labor, thus freeing the potter's time for something else.

Once slipcast pieces are removed from the mold, they should be trimmed of any seam lines; then, they are then ready to attach. Provided that the basic form is leather-hard, only water or the smallest drop of slip is needed to effect a good bond.

EXTRUDED HANDLES

Extruded handles are made with a small machine or hand-press tool that pushes clay through a shaped die into a continuous length. The die can be cut to form almost any cross section, and the clay pushed through it can be either used in its length or as a cross-cut.

The final result of an extruded length is visually similar to a simple wire-cut handle. Cross-cut extrusions are done by making the extrusion, then slicing it across to make handles like small slabs, sometimes with finger holes already in place. A small amount of trimming of rough edges is all that is needed before the handle may be attached.

Pug mills used in clay preparation can easily be adapted to make die extrusions, although there are currently many different makes of small extruders available in the marketplace.

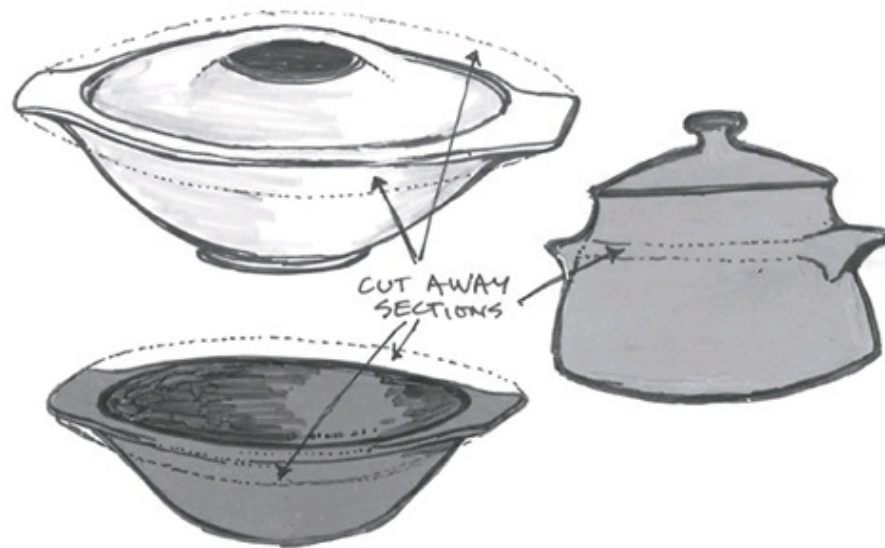
LUGS

In pottery, the term lug means a small handle or ear-like projection. Originally, these small handles were intended to be used to tie down lids or skin covers or to sling cords through to hang or carry objects. The term lug is usually applied to any small handle used for lifting or carrying, particularly on kitchen ware, casseroles and on teapots as a base to attach a handle of some other material. Now, they are often used in a purely decorative way, as an emphasis to the basic form.

Lugs on kitchen and cooking wares are usually applied horizontally and may be attached to the basic form either at the ends or throughout the length of one side of the lug. The placement and method of attachment usually depends on the function. On teapots, the lug is the attachment point for handles that can be made from bamboo, rattan, wood, metal or leather. Teapot lugs should be substantial — at

least as thick as a pencil — to eliminate the possibility of hot liquid accidents. Lugs can be made in the same way as any other form of handle and attached by simply using slip or water. Where lugs are used on cooking pots, they should be substantial enough for the user to hold and carry while probably wearing oven mitts. Also on cooking ware, it is often useful to press a soft, clay coil into the crevice that usually occurs where the lug joins the form. This not only strengthens the join, but it makes it easier to clean any burned-on foods or liquids.

Other lugs may be made by cutting away part of the rim, such as on some types of bowls or casseroles, where the handle is in fact the clay remaining. Coils of soft clay can be wrapped around a form requiring handles, attached and thrown on in a wedge-shaped flange with the thick end stuck to the pot. When this flange is pressed down, handles are formed directly, and the excess flange can be cut away either completely or partially. The partial cutting leaves a wide, soft ribbon between the handles on each side. This soft area can be used in a variety of decorative ways, such as fluting or stamping, or just left as it is.



Handles that are formed when sections of the thrown form are cut away.



WEIGHTS AND MEASURES FOR BASIC PRODUCTION ITEMS

If one is doing a great deal of repetition throwing, it is convenient to keep a list of basic weights and measures that give the amounts of clay needed and the sizes of objects at the throwing stage. Following is a list of weights and measures for standard items produced in my studio. These are for an average throwing thickness of $\frac{3}{16}$ " (5 mm) for smaller objects, and $\frac{3}{8}$ " (1 cm) for larger objects. If you throw either thinner or thicker than this, you will have to adjust accordingly.

DRINKING VESSELS



ITEM	WEIGHT (English)	WEIGHT (Metric)	HEIGHT (English)	HEIGHT (Metric)	WIDTH (English)	WIDTH (Metric)
6-oz. coffee mug	10 oz.	275 g	3"	7.5 cm	3"	7.5 cm
8-oz. coffee mug	14 oz.	400 g	5"	12.5 cm	3.5"	8.5 cm
14-oz. beer mug	1 lb. 5 oz.	600 g	7"	17.5 cm	3.5"	8.5 cm
Chalice (cup only)	1 lb. 2 oz.	500 g	4"	10 cm	3"	10 cm
Goblet (cup only)	12 oz.	340 g	5"	12.5 cm	3"	7.5 cm
Cup	11 oz.	300 g	2.75"	7 cm	3.75"	9.5 cm
Saucer	13 oz.	350 g	1"	2.5 cm	5.5"	13.5 cm

PLATES



ITEM	WEIGHT (English)	WEIGHT (Metric)	HEIGHT (English)	HEIGHT (Metric)	WIDTH (English)	WIDTH (Metric)
Charger (glutton plate)	5 lb. 2 oz.	2,300 g	1.25"	3 cm	14"	35 cm
Large dinner plate	4 lb.	1,800 g	1.25"	3 cm	11.5"	29 cm
Medium dinner plate	3 lb.	1,250 g	1"	2.5 cm	10"	25 cm
Side plate	2 lb. 3 oz.	1,000 g	1"	2.5 cm	8"	20 cm
Bread and butter plate	1 lb. 5 oz.	600 g	0.75"	2 cm	6.5"	16 cm

BOWLS



ITEM	WEIGHT (English)	WEIGHT (Metric)	HEIGHT (English)	HEIGHT (Metric)	WIDTH (English)	WIDTH (Metric)
Large bowl	5 lb. 12 oz.	2,600 g	6"	15 cm	12"	30 cm
Medium bowl	4 lb.	1,800 g	4.5"	11 cm	10"	25 cm
Small bowl	1 lb. 6 oz.	600 g	3"	7.5 cm	6"	15 cm
Onion soup bowl	1 lb. 5 oz.	600 g	3"	7.5 cm	6"	15 cm
Large mixing bowl	4 lb.	1,800 g	4.5"	11 cm	10"	25 cm

STORAGE CONTAINERS



ITEM	WEIGHT (English)	WEIGHT (Metric)	HEIGHT (English)	HEIGHT (Metric)	WIDTH (English)	WIDTH (Metric)
Large storage jar	5 lb.	2,250 g	12"	30 cm	5"	12.5 cm
Medium storage jar	3 lb. 6 oz.	1,500 g	10"	25 cm	4"	10 cm
Small storage jar	1 lb. 12 oz.	800 g	7"	17.5 cm	3"	7.5 cm
Jam or honey pot	1 lb.	450 g	3.5"	8.5 cm	4"	10 cm

CASSEROLES



ITEM	WEIGHT (English)	WEIGHT (Metric)	HEIGHT (English)	HEIGHT (Metric)	WIDTH (English)	WIDTH (Metric)
4-quart casserole	5 lb. 12 oz.	2,600 g	8"	20 cm	12"	30 cm
4-quart lid	3 lb. 8 oz.	1,600 g	—	—	—	—
2-quart casserole	4 lb.	1,800 g	4.5"	11 cm	8.5"	21 cm
2-quart lid	2 lb. 3 oz.	1,000 g	—	—	—	—
1-quart casserole	2 lb. 3 oz.	1,000 g	4"	10 cm	6.5"	16 cm
1-quart lid	1 lb. 12 oz.	750 g	—	—	—	—
Individual casserole	1 lb. 6 oz.	600 g	3"	7.5 cm	5.5"	13.5 cm
Individual lid	1 lb.	450 g	—	—	—	—

POTS FOR POURING



ITEM	WEIGHT (English)	WEIGHT (Metric)	HEIGHT (English)	HEIGHT (Metric)	WIDTH (English)	WIDTH (Metric)
Cream pitcher	14 oz.	400 g	5"	12.5 cm	3"	7.5 cm
1-pint pitcher	1 lb. 8 oz.	675 g	6.5"	16.5 cm	4"	10 cm
4-pint pitcher	5 lb. 12 oz.	2,600 g	14"	35 cm	6"	15 cm
Coffee pot	4 lb.	1,800 g	11"	27.5 cm	4.5"	11 cm
Coffee pot lid	14 oz.	400 g	—	—	—	—
Large teapot	4 lb. 6 oz.	2,000 g	8"	20 cm	8"	20 cm
Large teapot lid	9 oz.	250 g	—	—	—	—
Medium teapot	3 lb. 6 oz.	1,500 g	6"	15 cm	6"	15 cm
Medium teapot lid	7 oz.	200 g	—	—	—	—
Small teapot	2 lb. 3 oz.	1,000 g	4.5"	11 cm	5"	12.5 cm
Small teapot lid	5 oz.	150 g	—	—	—	—
1-liter decanter	4 lb. 6 oz.	2,000 g	12"	30 cm	6"	20 cm
Small decanter	2 lb. 11 oz.	1,200 g	8"	20 cm	5"	12.5 cm
Liqueur or saké bottle	2 lb. 3 oz.	1,000 g	—	—	—	—

SERVING DISHES



ITEM	WEIGHT (English)	WEIGHT (Metric)	HEIGHT (English)	HEIGHT (Metric)	WIDTH (English)	WIDTH (Metric)
Large cooking/serving	5 lb. 8 oz.	2,500 g	3.5"	8.5 cm	15"	37.5 cm
Small cooking/serving	3 lb.	1,350 g	2.25"	6 cm	10"	25 cm
Cheese bell	4 lb. 6 oz.	2,000 g	6"	15 cm	10"	25 cm
Cheese bell base	3 lb. 6 oz.	1,500 g	—	—	—	—
Butter dish dome	1 lb. 5 oz.	600 g	3"	7.5 cm	5.5"	13.5 cm
Butter dish base	1 lb. 5 oz.	600 g	—	—	—	—
Salt and pepper shakers	14 oz.	400 g	4.5"	11 cm	3"	7.5 cm
Egg bakers	14 oz.	400 g	1.25"	3 cm	3.5"	8.5 cm

CONSIDERATIONS

Throughout the range of utilitarian pottery, there are a number of generalizations that can be applied to almost every functional object. These concern the development of form, rim and foot or base. Most pots have all of these. Depending on the nature of the object and its intended function, it may also have handles, a lid and a spout or pouring lip. This is a summary of these needs, in question form, and it can be used as a quick reference guide. The questions relate only to form and intent and do not concern the many other questions that may be in the potter's mind, such as clay, glaze, surface, color, decoration and so on.



“Pitcher,” 1967, stoneware with iron slip and sgraffito under white glaze, oxidation fired at cone 9. Size: 11" high x 6" diameter.

FORM

1. What will the object be used for?
2. Is its size and weight suitable for its intended use?
3. What degree of control should the function have over the shape of the object?
4. If the object is to be used in the hand, e.g., goblet or decanter, how does its form relate to the shape of the hand? Is it easy to lift, pour, drink or serve from?
5. If the object is designed to pour from, where is the center of gravity, and how will this leverage affect use?
6. Can it be easily cleaned?

FOOT OR BASE

1. Does it need a trimmed foot?

2. Is the foot positioned correctly to support the curve of the form?
3. Is it wide enough for stability?
4. Is it small enough to be elegant, if that is desired?
5. Does it stand evenly?
6. Does it complete and complement the form?
7. Would a tripod or quadruped of small feet give it better stability?
8. Should the foot be wheel trimmed or finished by hand cutting?
9. Would a trimmed double or multiple foot help to support sagging parts, e.g., on plates?
10. Is the base rough and likely to scratch surfaces?

Rim

1. What type of rim best suits the needs of function? Is it to carry a lid?
2. Is it likely to be drunk from?
3. If it is to be drunk from, how does it fit the shape of the mouth?
4. Is it substantial enough to withstand the general wear and tear of use?
5. How wide does it need to be for easy cleaning?
6. Does it complete and complement the form?
7. If it is for storage, is it wide enough to easily get hands, spoons and scoops in and out?

Lid

1. What type of top termination is needed on the pot?
2. What kind of lid is most suitable for the function?
3. What type of lid best suits the form?
4. Is the function of the object such that a double lid might be better?
5. If the object has both lid and pouring spout, how does this affect the lid seating?
6. Is it to have a knob or other form of handle?
7. Is it made in such a way that it won't fall off or out?
8. Does it fit?
9. Is it an effective sealer?
10. Would a lid of another material be more suitable?
11. Does the lid need a hole in it to either facilitate pouring or to allow evaporation and prevent condensation?
12. Is the edge of the lid substantial enough to take everyday use?
13. Does it need a locking device?

14. If it is on a casserole, can it be easily picked up when it is hot?

SPOUT OR POURING LIP

1. Would the form be better with a spout or a pouring lip? What type of spout is most suitable?
2. Does it pour without dripping?
3. Does it drip without pouring?
4. Does it complement the form?
5. Is it placed so that the pouring end is higher than the highest point of liquid likely to be inside the container?
6. Where on the pot should a spout spring from?
7. Is the end to be cut to break the vortex spiral?
8. Will it twist in firing?
9. Is it wide enough to allow the liquid through easily?
10. Does it need a strainer?
11. How big should the strainer be?

HANDLES, KNOBS AND LUGS

1. Does the object need a handle or handles? Do the handles complement the form?
2. How do they feel in the hand? Do they feel comfortable and secure?
3. Are they substantial enough to take the weight of the pot plus its contents?
4. Are they for decorative effect only?
5. If they are on cooking pots, are they able to be picked up when wearing oven mitts?
6. How many fingers need to be accommodated?
7. Are they too large or too small?
8. What is the thickness and width of the handle?
9. Does it contribute to easy lifting and leverage?
10. Where should the handles be placed?
11. Would another material, such as wood, metal, rattan, bone, etc., be suitable or better than clay handles?
12. If a teapot has a bale handle going over the form, is it vulnerable to easy breakage?
13. If a teapot has lugs to hold a cane or rattan handle, are they substantial enough to hold the weight of the teapot and contents without fear of breakage?
14. Does the handle need a thumb stop?

15. Are the edges excessively sharp?



PART III

CONCEPTS OF STRUCTURE AND EMBELLISHMENT



“The basic process of composition in pottery, as in any other art, appears to depend upon an intuitive perception of the way in which similar and dissimilar elements can be coordinated into a new whole”

-Bernard Leach, A Potter's Portfolio

CHAPTER 8

THOUGHTS ABOUT FORM



This chapter is made up of three separate essays that analyze form and proportion, and their relationship to each other and to us. They consider form from organic, geometric, architectural and human origins, relating them to the production and development of functional pottery.

You may question why and how these relate to the contemporary process of making pots. All I can say is that some 50 years ago, when I was a student and starting to formulate ideas on aesthetics for any type of pottery, my personal research led me into some areas that have been a source of constant use and growth ever since. At that time, I didn't know just how important they would be to my personal development, and many things learned are soon forgotten. However, some facts bury themselves deep in the brain and reemerge almost in an intuitive way to control and to guide one's thoughts and ideas.

I never have been a mathematician, but I always have been interested in form. The more one looks at form, the more one realizes how closely allied to mathematics it really is. It all seems quite abstruse and unconnected to clay. One has to realize that mathematics is at the core of life itself, from the DNA spiral to the proportions of a face, and it permeates everything that we are and do. For me personally, mathematics has given a foundation of understanding and developing form for both functional and one-of-a-kind pottery that has served and continues to serve me well. Pottery is, at the same time, the most abstract and the most domestic of the arts.

Experiencing the semifluid process of making pottery on a wheel may seem far removed from considerations of a mathematical or architectural nature. Yet we all work with geometric forms. Our wheel sends clay in a spiral from a circular base, and our finished results are as miniature architecture, beset with many of the same

structural problems as full-scale buildings. In reality, the interaction between seemingly formless clay and mathematics starts as soon as the ball of clay hits the wheel. It becomes a spinning mass revolving on an axis — a microcosm of our own planet spinning in space. Each ball of clay represents a new world, governed by natural laws and sciences. These essays hope to explore some of them.

Dictionaries generally define geometry as the branch of mathematics that deals with points, lines, surfaces and solids and examines their properties, measurement and mutual relations in space. Two-dimensional images, such as circles, squares, triangles, etc., are called plane geometry. When a circle is transformed into a three-dimensional object, it becomes a sphere. This is called solid geometry. Looked at in its most abstract form, pottery is solid, or threedimensional, geometry, much as eggs, oranges, the earth, the sun and mineral crystals are. The interaction of solid geometrical forms creates compound form. The potter working on a wheel seldom creates pure geometric solids, as did the power that created oranges, planets or mineral crystals. The forms are more or less geometric. “Essay One: Geometry and Universal Symbols” deals with these aspects, and it is echoed in “Essay Two: Forms and Forces, Nature and Growth.”

The principles of solid geometry and the development of ceramic forms are closely integrated. Potters often feel the process of throwing to be an organic movement. So it is. But the forces of constraint (gravitational force toward the center) confronting the force of movement (centrifugal force outward from the center), sandwiching clay between them, invariably causes a form with a geometric basis, no matter what shape that form eventually ends up with. The whole process of throwing is a balance between these forces.

The type of force a potter uses to counteract the centrifugal forces of clay on a revolving wheel is similar to the forces that mold planets in space. In the case of the potter, the hands control this outward movement by pressure toward the center of the form. In the case of the earth, the force of gravity contains the outward thrust. Without these external pressures, the pot would probably spin itself off the wheel, unless its axis is absolutely true, and the planet would gradually disintegrate, with earthen projectiles hurtling off into space.

Gravity affects the way things grow and the way things are built. Thrown pots combine growth and building. They are structures that grow in a spiraling organic way from a soft inorganic mass. When the soft forms become hard and are fired, they become like Lilliputian architecture with arches, buttresses, cantilevers and domes. These forms are subject to the forces of gravity, vacuum and pyroplastic deformation (deformation under the effects of heat). “Essay Three: Proportion and

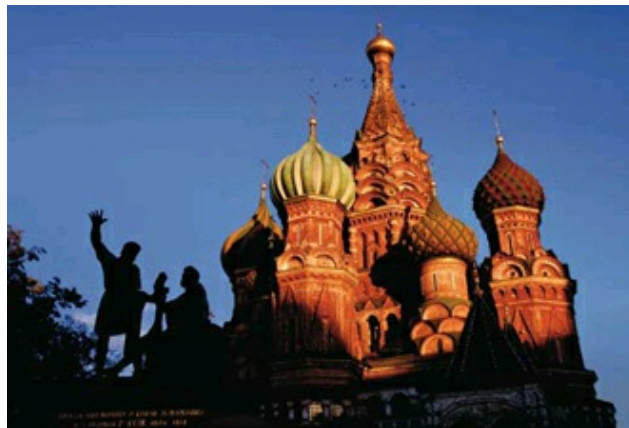
Ratio” explores these relationships.

The parts of a structure may be related to each other by proportion. If we take the adult human frame, for example, we find that: the average head is one-eighth of the body height; the eyes are halfway between the chin and the top of the head; the navel is more or less halfway between the soles of the feet and the middle fingertip of the upstretched hands; and the distance across the chest between the middle fingertips of outstretched hands is equal to the height from the soles of the feet to the top of the head. Many such examples of proportion can be found.

An innate understanding of proportions like these is central to artistic endeavor. The relationship, or proportion, of one part of a form to another part of the form can be either harmonious or discordant. According to Webster’s dictionary, “aesthetics is the study or theory of beauty, and of the psychological responses to it; specifically the branch of philosophy dealing with art, its creative sources, its forms and its effects.”

The struggle to balance proportions of an object in a harmonious way is part of what aesthetic concerns are for the potter. Throughout history, various approaches to proportion have been developed, which can help in making decisions of an aesthetic nature. These are explored in the “Essay Three: Proportion and Ratio.”

I am not suggesting that every person working in clay will benefit from these ideas and guidelines, since we are all different, and the intellectual interplay of mathematics is certainly not for all. However, if I can give my readers insight into considerations that have strongly affected the approach to developing my own work, then it may possibly help them with theirs.



St. Basil's Cathedral, Moscow, built 1554-1560 A.D. Photo by Francis Pettit.

ESSAY ONE:

GEOMETRY AND UNIVERSAL SYMBOLS

Geometry is full of figures that have symbolic meaning far beyond the obviously simple graphic outline we see as circle, square, triangle, rectangle and oval. In many cultures, there are a host of hidden meanings in these two-dimensional, or planar, figures, and in their three-dimensional, or solid, counterparts. To what extent these hidden messages were understood by the cultures concerned can only be a matter of guesswork.

To us now, they may or may not be relevant, depending on the attitude and perceptions of the maker and the viewer. Most of the time when we make pots or any objects, we are either unaware of these symbols, or they are so deeply imbedded in the back of the psyche as to be outside the process of making forms with which we may be completely preoccupied. It may be interesting to know a little of the symbolism of these forms and figures, as they had definite meaning for our forebears and may well have unconscious meaning for ourselves and the viewers and buyers of our work. Most symbols come from an association of ideas, and these may well relate to our works in clay.



Geometry and universal symbols.

SYMBOLISM IN GEOMETRIC FORMS

CIRCLE

The circle represents totality, wholeness, the self-contained, original perfection, eternity, timelessness, movement, celestial unity, water, dynamism, manifestation, completion, fulfillment, God, the heavens and all cyclic movement.

As the sun, it represents masculine power, but as the soul or psyche, it is the feminine maternal principle. A circle with a dot at its center depicts a complete cycle and cyclic perfection, while in astrology it depicts the sun.

SQUARE

The square represents the earth, as opposed to the circle of the heavens, earthly existence, static perfection, immutability, integration, the totality of the Godhead — three sides being its threefold aspect and the fourth being totality. It also denotes honesty, integrity, straightforwardness and morality. It is the fixation of death as

opposed to the dynamic circle of life.

In architectural symbolism, the square represents the fixation of the buildings of agricultural and sedentary peoples in opposition to the dynamic and endlessly moving circular formation of nomadic tents and encampments. It represents limitation and therefore form.

In Pythagorean philosophy, the square represents the soul.

TRIANGLE

The triangle represents the threefold nature of the universe: heaven-earth-man; father-mother-child; man as body-soul-spirit; and the mystical number three. The equilateral triangle depicts completion.

The upward-pointing triangle is solar; it symbolizes life, fire, flame, heat, the masculine principle, the lingua, the spiritual world and the trinity of love, truth, and wisdom.

The downward-pointing triangle is lunar; it represents the feminine principle, the matrix, the waters, cold, the natural world, the body, the yoni, and the Great Mother as genetrix.

RECTANGLE

The rectangle is the lateral development from the square; it represents the same things.

In its upright form, the rectangle represents the masculine principle, the lingua or phallus, resurrection and the renewal of life.

OVAL

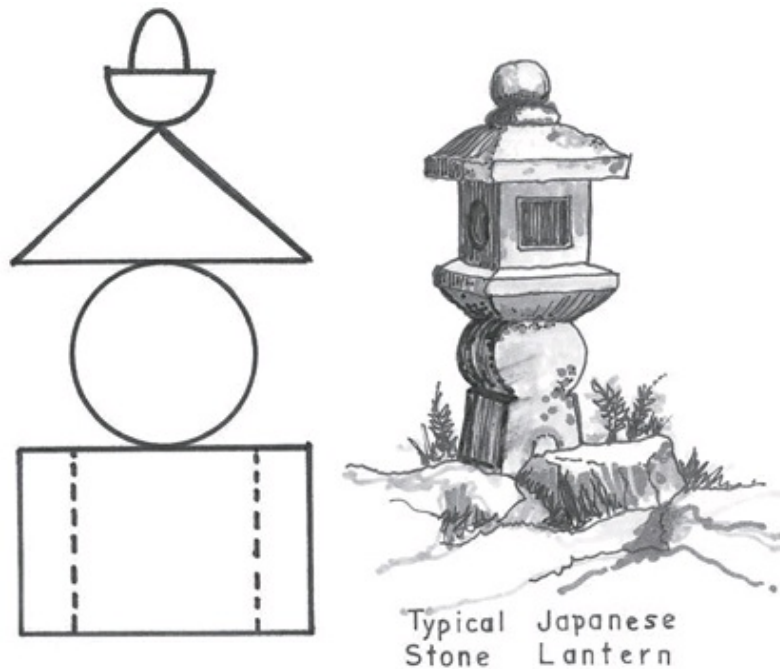
The oval in its upright form represents the female life symbol, the vulva. It has many similar meanings to the circle.

INTERRELATIONSHIPS OF GEOMETRIC FORMS

In many cultures, these various forms are incorporated into architecture, art and artifact. Perhaps the most complete is in the Japanese sacred stone tower, from which both the five-storied pagoda and stone garden lantern were to develop.

The five parts symbolize the five elements of the universe in ancient Japanese cosmology: sky, wind, fire, water and earth. A simplified threepart version symbolizes spirituality, consisting of heaven (the triangle) and earth (the square or

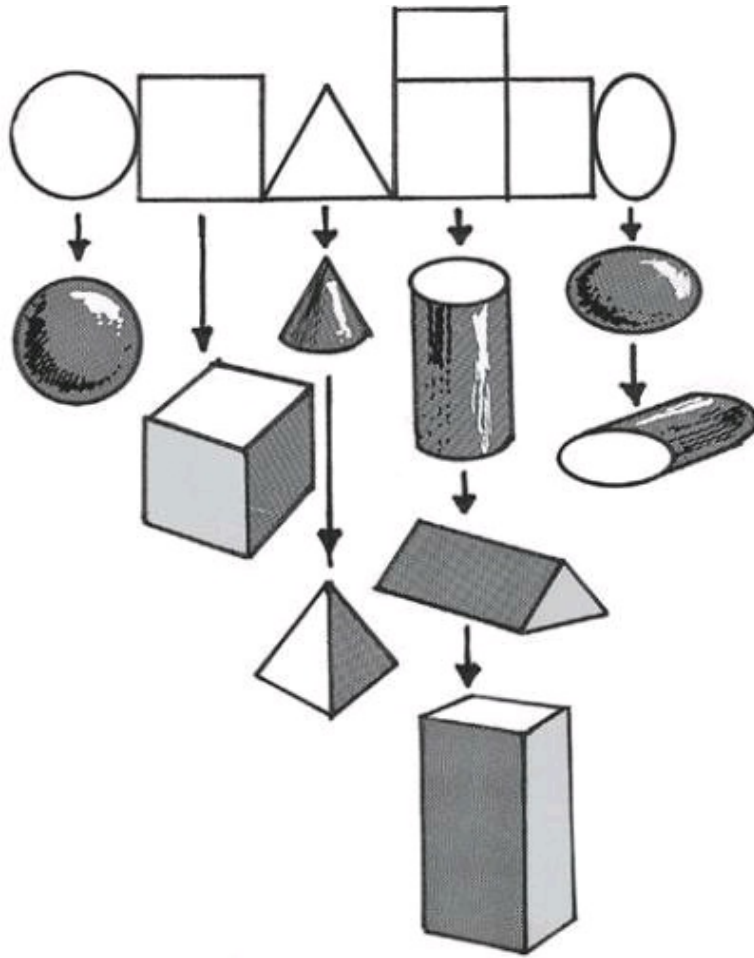
rectangle), with man (the circle) between them. Universal symbols in combination with one another can take on a mass of different meanings.



Japanese stone lantern.

If we look at these plane geometric figures in their solid forms, we find sphere, pyramid or cone, cube, cylinder, or parallelepiped or prism and ellipsoid. In their three-dimensional forms, they maintain their original planar symbolism.

Geometric solids are basic forms of beauty, and they have been appreciated as such by different cultures throughout the world at all periods of time. We can call these pure forms. They are just as beautiful now as they ever were, and the forms of objects that are based on geometric solids or combinations of geometric solids generally receive greater visual appreciation than those that are not. When these forms are cut into sections, they retain elements of beauty found in the basic form. The most obvious of these sections would produce hemispheres, parabolas, truncated cones, discs, domes and arches.



Plane geometric figures to solid geometric figures.



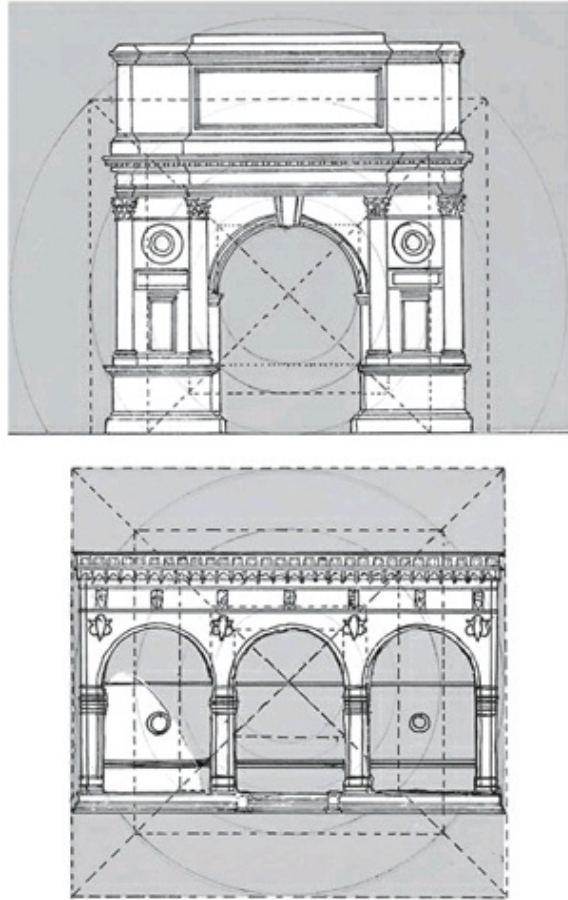
Forms where the major volume is contained within a sphere or hemisphere.



Forms where the major volume is contained within a square or rectangle.



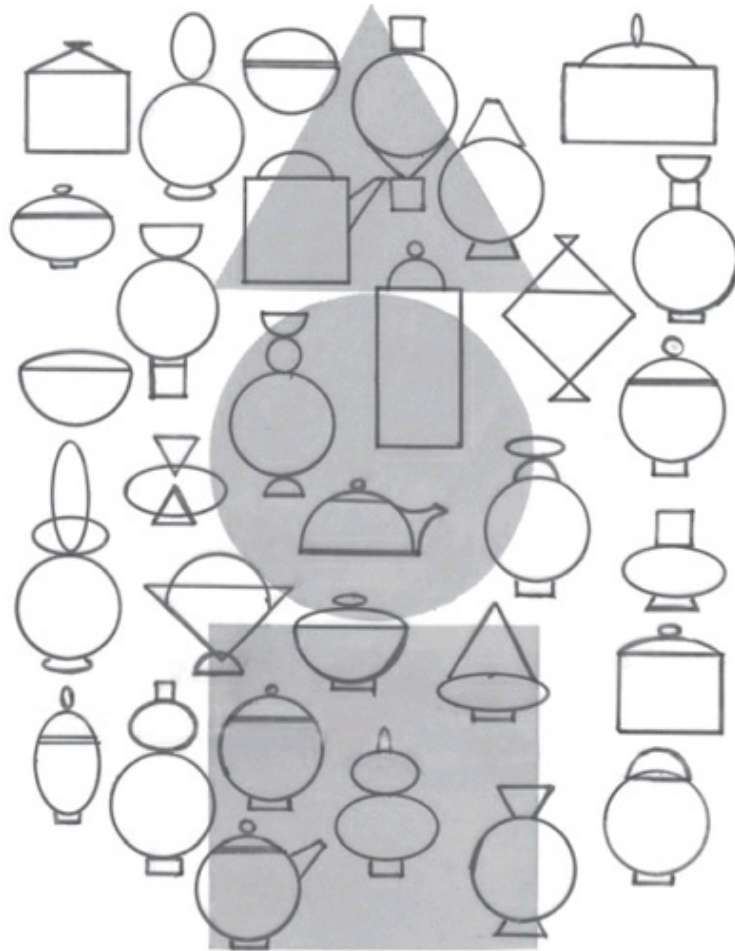
Forms where the major volume is contained within a parabola.



Two architectural designs determined by the proportional scheme of the circle and square. Top: The Arch of Titus, Rome, 81 A.D. Below: The Loggia Dei Lanzi, Florence, 1376.

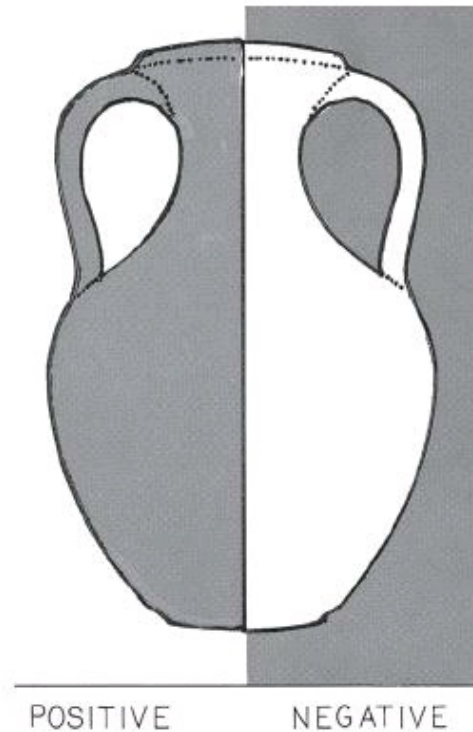
Geometric solids form the basis of most of the world's architecture. Architecture is the art of enclosing space. Pottery is, in essence, miniature architecture, displacing and enclosing space by the development of three-dimensional forms. Spheres, cylinders, domes, arches and cones are forms that may be equally associated with both architecture and pots. Architecture and pottery have much in common; they can be the purest or the most debased of forms.

The development of complex forms by the interaction of these solids is infinite in variety, and the following two-dimensional drawings give a small idea of the complexity that can develop.



Montage of forms using the circle, square, triangle and ellipse.

One thinks of forms as being positive, and the spaces around and between them and between the main form and its details as negative



Form showing positive and negative.

In producing the composition that is a piece of pottery, an understanding and awareness of the interplay between positive and negative shapes can have a profound effect on the potter's ability to visualize form. For instance, negative shapes that are left between a pot's handle and its main form are part of the overall outline. If the negative shapes are visually satisfying between one part of a form and another, the total aesthetic quality is enhanced, since everything has been considered. Negative spaces can be further used to echo or contrast other aspects of the form. Ideas for new forms can easily develop from looking at the negative spaces between a group of similar forms.

Developing an awareness of positive and negative shapes, like any other form of aesthetic understanding, is a slow process. But it is an important one to learn, as it deals with the totality of composition — how all parts relate to one another. Looking at objects upside-down also gives a fresh view that concentrates the senses. One becomes aware more quickly of relationships of form that are either pleasing or not. A lack of awareness often leads to visual battles taking place within a form and an inability to correct visual problems.

In doing this analysis, I am not trying to intellectualize the objects as geometrical solids, but show how these geometric volumes affect the way we see objects and what a large percentage of the world's population perceives as beautiful form.

“Essay Three: Proportion and Ratio” also reflects this.

The relationship between historic forms and those being made by studio potters today is closer than you might think. I don’t suppose for one minute that the potters of old sat down with drawing compass and ruler and concocted a variety of pleasing outlines. Most of the process of developing useful forms came from diverse cultural backgrounds and the needs of a particular society at that particular time. They produced pots that were eminently suited to particular functions, and for the most part, they did it with no intellectual overtones. The fact that they are as aesthetically pleasing as they are is probably due to an intuitive joy in form and proportion.

The only valid reason here for analyzing and intellectualizing over forms is to try to bring things down to a basic simplicity, from which one can perhaps grow with a fresh view. The combination of the discovery of porcelain manufacturing, mass-production methods and a revival of interest in the classical world of art and architecture brought about a new vigor. The Industrial Revolution to some extent re-established some classical values and formed a counterpoint to the simple potter whose work showed the quality of materials and process. As with all new directions, the Industrial Revolution brought with it both good and bad. One of the bad aspects has been the massive volume of questionable ceramics that has since cluttered our world with visual debris and ugliness. Unfortunately, this has had a disastrous effect on people’s ability to see innate qualities of form. Pure forms capture an essence of beauty and a form of innocence missing from the majority of pottery produced since 1750 A.D., where simple forms became submerged under a morass of Rococo and Baroque detail.

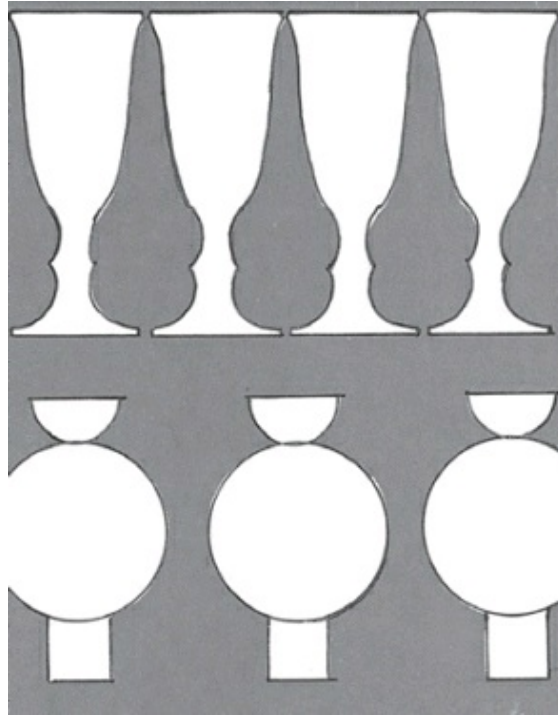


Illustration showing the use of negative space to develop new forms.

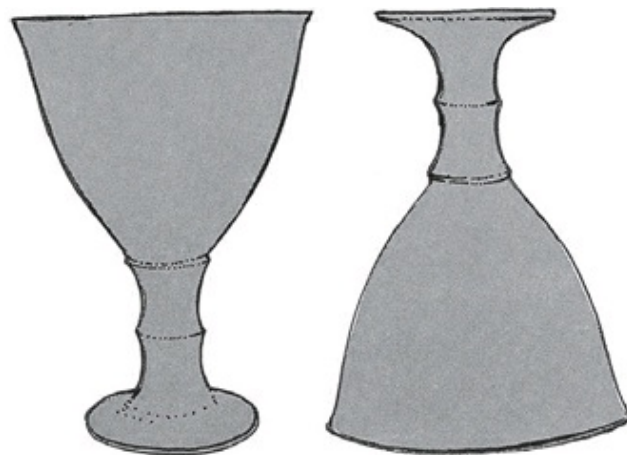
Perhaps it is time to individually take another look at where our forms have been, where they may be going and why they may be going that way. The eclecticism that we potters practice in the development of what we consider to be new forms may be a type of seduction. Once seduced, it is difficult to be pure again. The road is not necessarily one that leads to ruin, but one needs to be acutely conscious of its direction. For many, purity is not a comfortable state, possibly because they either enjoy the clutter of visual debris that surrounds us, or because they have never been able to see beyond it. For these people, the luxurious and opulent, or the chintzy, froufrou nostalgia of the late Victorian period might be just their idea of heaven. On the other hand, many people enjoy the classic, no-nonsense purity of a perfect form, like living in a white cube, unadulterated by extraneous material. Most of us probably fall somewhere between these extremes, and while the work that we produce will at times reflect both extremes, we are comfortable in our niche in the middle.



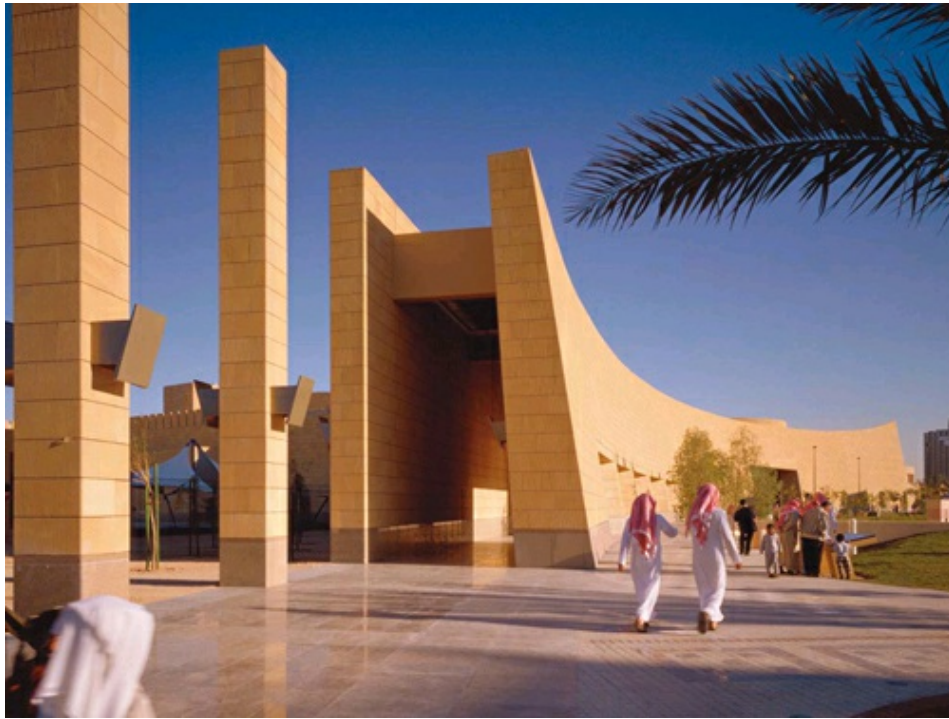
This jug is a combination of geometrical shapes as shown in the diagram. The negative space between the handle and form contains a circle. "Jug," Silhouette Ware, Persia, late 12th century. Courtesy of the Montreal Museum of Fine Arts, Canada.



The form of this Korean ewer is a combination of circles and truncated cones, also called the double gourd shape. The curvature at the spout is the same as the handle, and it also is the same as the negative shape of the waist of the pot. Courtesy of the Brooklyn Museum, USA.



Looking at objects upside down often helps to develop satisfying relationships in proportion from one part to another.

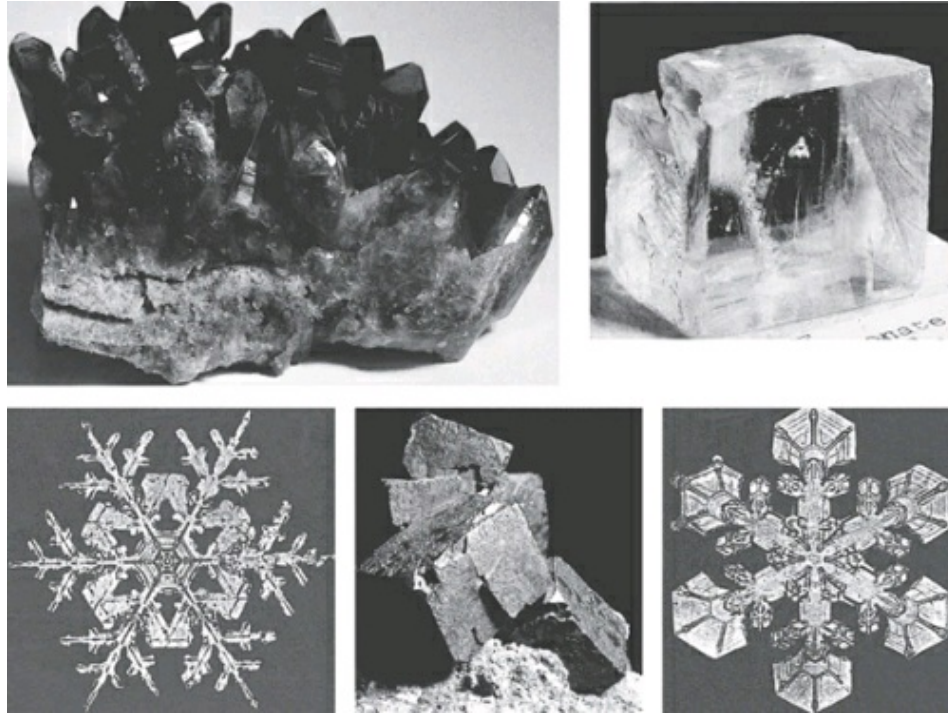


Architectural image, Raymond Moriyama, the Saudi National Gallery in Riyadh, Saudi Arabia.

ESSAY TWO: FORMS AND FORCES, NATURE AND GROWTH

When casually looking at or thinking about nature, one doesn't usually see or think of forms as structured as those found in geometry. One tends to think of things of nature as random or organic, meaning amorphous or formless. Nothing could be further from the truth. All matter has form, from its molecular structure up.

When people talk of organic forms, they usually mean those seemingly disorganized, not-quitegeometrically-true, asymmetrical objects of nature that often become the idea source for pottery that is hand-built, as opposed to being made within the constrictions of a potter's wheel. Spheres, cubes, cones, pyramids and ellipsoids somehow don't seem to fit. They are too pure. Yet all of these geometric solids are there in nature in abundance if one goes looking for them. We live in a world of wonders, but we often pass through seeing nothing.



Angular solid forms.

Mineral crystals give us the majority of the angular solid forms. Spherical and ellipsoidal forms are found in abundance in the shapes of fruits, vegetables, suns and planets.

A great deal of organic growth is twisting or spiral, and it may be seen as analogous to the spiraling growth of a pot being formed on a wheel. From the rhythm of wedging to the final pull on the wheel, clay goes in a spiral form. Sometimes the spiral movement affects the way things work, as the thrown clay twists slightly during firing. The twisting of long necks or spouts are examples of this, as is the vortex motion of liquid coming from the finger ridges of a thrown spout. Spiral or helical growth in nature is found in many flowers, seed pods, pine and fir cones, animal horns, ferns, coiled snakes, the tentacles of an octopus, ears, shells, movements of water, galaxies, clouds, cells, fingerprints or any form of vortex.

The spiral is another of man's symbols that has been in use since Paleolithic times, appearing in pre-dynastic Egypt, Crete, Mycenae, Mesopotamia, India, China, pre-Columbian America, Europe, Scandinavia, Britain and Oceania. It represents solar and lunar powers, the air, the waters, the increase and decrease of the sun, the waxing and waning of the moon, birth and death, fertility and the manifestation of energy in nature. The double spiral represents all rhythms of nature, the yin and yang, androgyny and the continuity between cycles.

Whether they are geometric or organic, manmade or the product of nature, forms are the potter's stock in trade. Everything that he or she produces has form. For most of the last essay, I was referring to form stripped down to its essence: pure form. In reality, most functional pottery cannot be just pure form, since it is expected to do something and thus usually requires ancillary parts and attachments, such as handles, lugs, lids, knobs, feet, spouts or pouring lips. If a relatively pure form is the basis for the object concerned, the likelihood is that it will probably be visually pleasing. However, when one adds various parts to make it function, one is then creating a composition of interacting or interlocking forms. At this point, making a functional object assumes a new direction, becoming sculptural or architectonic.



Illustration showing the spiral.



Illustration showing the double spiral.



Curvilinear forms in fruit and vegetables.



Spiral forms in nature.

Concerns that the potter has to deal with at this point relate to the combination of aesthetics and function. How long does a spout have to be to function both visually and physically? What angle should it be from the body? Is it to be a thin tube or a truncated cone? Where does a handle have to go? What relationship has a lid or cover to the overall form? If there is a spout, handle and lid on the pot, how do these relate to each other, as well as to the basic form? Some of these aesthetic questions will be looked at in the “Essay Three: Proportion and Ratio,” but in concert with the problems of aesthetics and function, there are also some considerations of a purely technical nature.



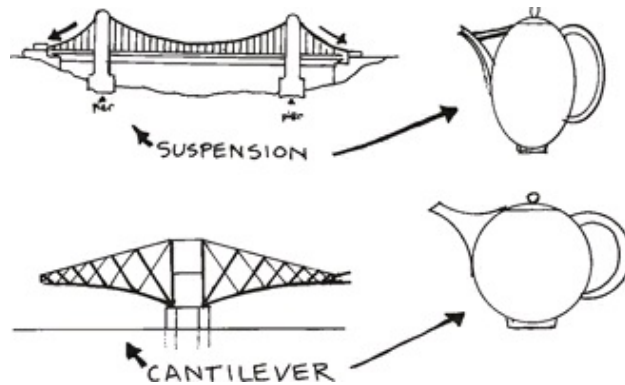
Forms of household objects.

Depending on their placement, handles and spouts are, to some extent, unsupported extremities. They are loops or thrusts of clay growing away from the basic form. If a clay is fired to a maturing point that approaches vitrification, or turning to glass, as most properly fired pottery clays do, the clay will soften and begin to sag and slump. At this point, a combination of both pyroplastic deformation and the force of gravity take over. If a spout is excessively long and placed at a near horizontal angle, it may begin to slump. The same thing is true of an excessively large or loopy handle. The basic principles here are similar to those in architecture, related to cantilevered structures. In the historical pots of many cultures, one notices supporting structures that hold the spout from drooping.

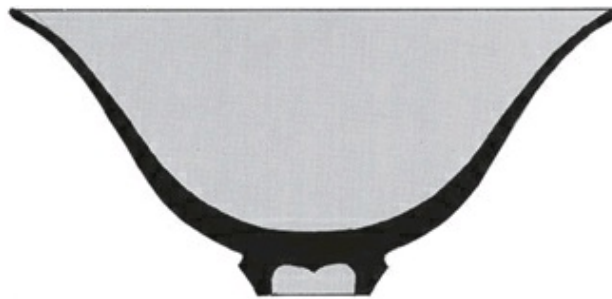
There are two ways to resolve the possible problem of these drooping details, both of which are common in architecture, particularly in bridge design. The jutting section of the form is either supported from above, like a miniature suspension bridge, or it has a wide base that forms a graceful, self-supporting curve, similar to a cantilevered bridge, with a solid base moving to a relatively thin center point.

The structure of a bowl also needs a self-supporting curve, or it may well collapse or deform. It is rather like a bridge, but upside-down and in reverse. A bowl is usually marginally thicker in the center than at the outside edges. This thickness lends support to the curve, where the interior base flows into the walls

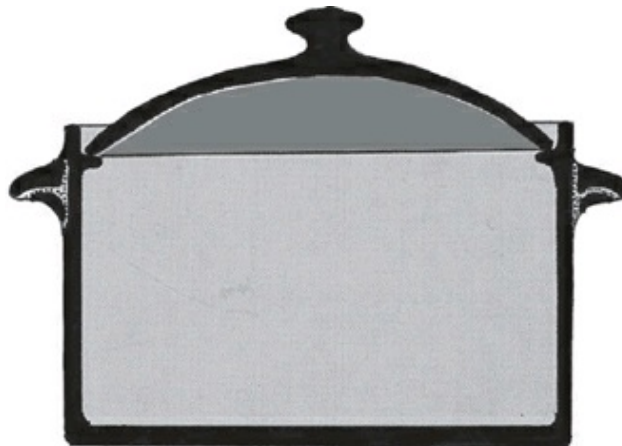
with little or no perceptible angular articulation in the form. There is a clear flowing line, like a hemisphere, or half of an ellipsoid. If the foot is improperly placed, the bowl may slump. If the structure is right, it can support a huge form, as the trunk of a tree supports a framework that thins toward its edges.



Illustrations showing various methods of support.



Thickening of lower curves supports the weight and thrust of the bowl.



The lid acts as a buttress to hold a form in place.

The architecture of a dome is similar to the form of a lid, especially if the lid is quite wide. The shallower the dome, the less likely it is to support itself. It's important for domed forms to be self-supporting, or they likely will fall in. If they

are not selfsupporting, they have to have some form of buttress to absorb stresses and tensions. We don't often put buttresses on pots, but there are times when the pot itself performs the function of a buttress.

For example, casseroles often have handles on the sides and carry a lid. If an arched or domed lid sits on a gallery on the inside of a stoneware casserole and is fired in place, the form of the pot will absorb much of the downward pressure that can occur as the clay softens and the lid begins to slump.



“Olive Oil Jar,” Tunisia, contemporary, private collection.

Firing the lid in place does two things: first, it stops the lid from slumping, and, second, it stops the likelihood that the pot will warp into a slightly oval shape from the added side weight of the handles. It is much like a roof on a building that covers and protects whatever is inside and also helps to stop the walls from falling in or out. Roofs and lids are both details of their respective forms that we tend to take for granted. However, to have a building that works and a lidded pot that functions well, these details need thorough consideration.

Gravity is the force that tends to pull all bodies in the earth's sphere toward the center of the earth. Combined with the effects of heat, it is responsible for most accidental deformation that occurs in a kiln, as the objects slump downward. Gravity is also the force to be reckoned with when one lifts and pours from a vessel such as a teapot. The volume of liquid contains a center of gravity. The placement of a handle can improve or impede the use of the teapot, and it can radically alter the amount of strength needed to lift the pot and pour out the liquid. Handles on pots fulfill much the same function as levers do in mechanics. They should make the object easier to use.

The principles of leverage as they relate to functional pottery apply primarily to

objects designed to pour: pitchers, teapots, coffee pots, etc. If one makes a 2½" cube of solid clay, it will weigh approximately one pound. To lift that cube requires no great strength or output of energy. However, if one were to put the cube on one end of a 12" wooden ruler and try to lift the ruler by only holding the opposite end, the apparent weight would seem to be many times the actual weight. If this principle is applied to a pouring vessel which in itself weighs only a little, it may seem to be far heavier than it actually is, and thus awkward to use.

In the great majority of cases, handles are placed on pouring vessels in such a way that the energy needed to use the object is two or three times what is necessary, which therefore puts excessive strain on the user's wrist. If one takes any pouring vessel and looks at how far the center of the weight (also the center of gravity) is from the handle in a horizontal direction, one can easily judge how awkward that object will be in use.

The center of gravity of a pouring vessel can easily be found by doing this small exercise:

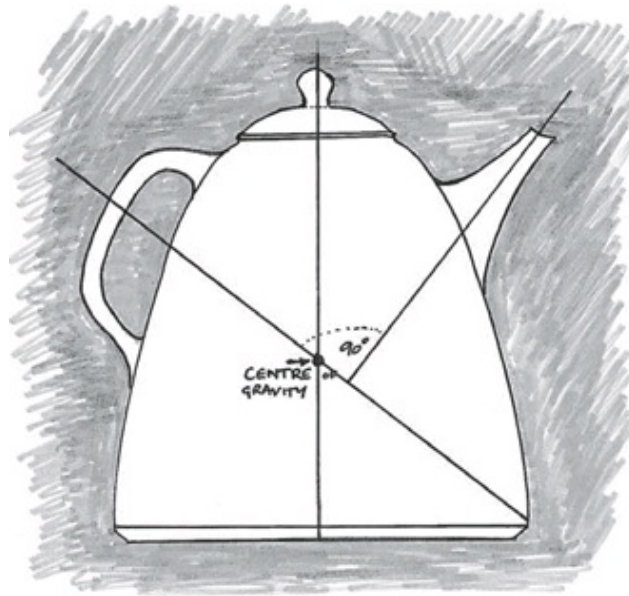
1. Make a small, thin cardboard profile cutout of the object, complete with a handle. Draw a vertical line from the center of the base to the center of the top.



How one finds the center of gravity.

2. Take the cardboard form in the right hand, and tilt it so that there is a vertical line from the bottom left part of the base through to the center top part of the handle. Draw this line. Where the two lines cross (point A) is the center of gravity and also the point of balance. The further the handle is from the center of gravity, the more awkward the object is to pour from. Conversely, the closer the handle can be to the center of gravity, the easier it will be to use.

3. For maximum efficiency in use, place the handle and spout subject to the following simple law: Find the center of gravity, then draw a line from the center of the handle through the center of gravity to the extremity of the pot. The spout should be at right angles to this line for efficient leverage and, therefore, easy action.



The angle of the spout to the handle and the center of gravity,

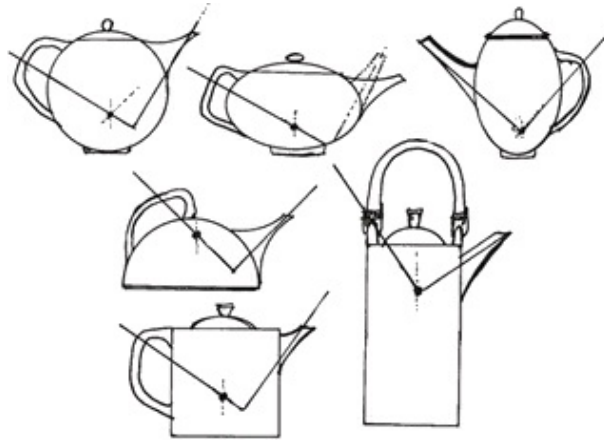
A pouring vessel designed with these principles should pour freely by being hung on a finger or thumb, and little wrist action should be needed. If followed, this law will always enable liquid to be poured from a vessel without making it seem heavier than it actually is.

To what extent a potter may have to compromise his artistic concept of a pouring vessel by the use of such a law is a private decision. It becomes a balance between visual aesthetic and ease of function. With a great deal of thought devoted to the framework in which the potter has to operate, he or she can accommodate both. It is an interesting problem.

The forces of nature often have an unseen effect in our work, but if one can bear these effects in mind, it will possibly help in the production of good work. Often when one has made something, one senses that there is something wrong, but it is difficult to put a finger on the problem. Analysis of both form and function will usually help to correct things. Most of the time, a potter works in isolation with only his or her own aesthetic sensitivity to fall back on.

Our time of study is limited in various ways, and we are thrust into the world to do our work with a less-than-complete understanding of the forces that control it.

We make our own aesthetic decisions without the backup facility of a teacher to assist. Often, through limitation or lack of study, we feel intimidated by the work we want to do, and we end up copying what somebody else has already done. Who is to say that the person copied is any more proficient than the copier? The clone is then at a point of double deficiency: first, a lack of his own creative input, and second, an inability to analyze what works.



The optimum placement of spouts and handles.

**“The superior man knows what is right,
The inferior man knows only what sells.”**

Chinese philosopher Confucius,
sixth century B.C.

The more that one becomes aware of the many concerns relevant to making functional pottery, the more one will develop an intuition and deep understanding of how things relate. If we learn to ask “Why” before “How,” we are well on the way to understanding the problems that we set for ourselves, and possibly becoming superior.



Le Corbusier - The Chapel at Ronchamp. Photo by Franc D'Ambrosio, courtesy of D'Ambrosio Architecture and Urbanism.

ESSAY THREE: PROPORTION AND RATIO

**“Proportion is the power that brings
out the smile on the face of things.”**

—Le Corbusier

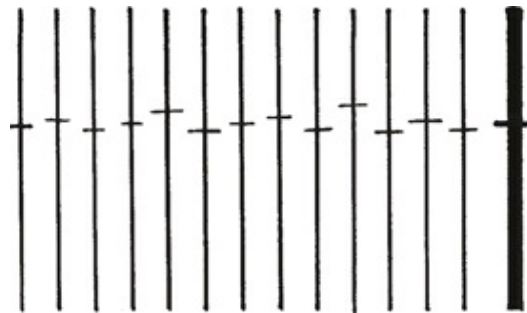
Proportion and ratio play key roles in art.

As defined by the dictionary, proportion is a portion or part in relation to the whole; the relation between things or magnitudes, as to size, quantity, numbers, etc; the relationship between parts or things, especially harmonious, proper, or desirable relationship; and balance or symmetry. Ratio is the relation between two similar magnitudes, in respect of quantity, determined by the number of times the one contains the other.

If one looks at an object from a long distance and is unable to visually pick out the details of the object, the first thing that the eye and brain combine to do is to look at the ratio of height to width and relate these to previous experiences and ratios. As the brain does this shuffling act, it asks itself what the particular relationships are that this object has that can define what the eyes are seeing. From previous experience, the brain can tell whether the distant form is a house, car, person, sculpture, animal or whatever else; it uses an unconscious process that recognizes ratios, proportions or forms.

We don't have to think about these ratios; they have become intuitive. As we look at the world around us, we intuitively analyze ratios of one shape against another. This unconscious process occurs to us much more than we may realize. Concern with ratio and proportion has been a major preoccupation with philosophers, artists, architects and mathematicians for at least 2,000 years.

The Greek philosopher-mathematician Eudoxus is said to have carried a walking stick with him, which he asked friends to visually divide into two parts at whatever point they sensed to be the most pleasing. Much to his satisfaction, the great majority of people chose a point at or close to the same place on the stick. From this, he deduced that most people are spontaneously drawn to the same ratios. This is a useful way of testing people's feeling for ratios. Ask a number of people to divide a line so that a pleasing relationship exists between the two parts.



The results of the line test.



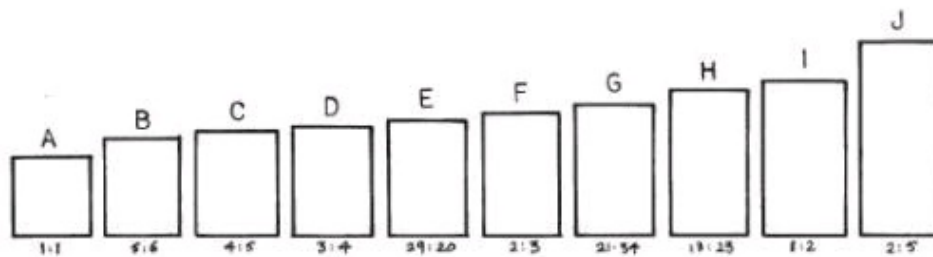
The average of a large number of divided lines generated by the line division test.

The division of the line into two unequal parts finds that the ratio of the whole length to the longer part is the same as the ratio of the longer part to the shorter part. Most people find this to be a particularly happy division, where neither part is too large or too small. We can say that their relationship is harmonious. A division in the center would lack interest, and a division with one part very short and the other very long would be unbalanced.

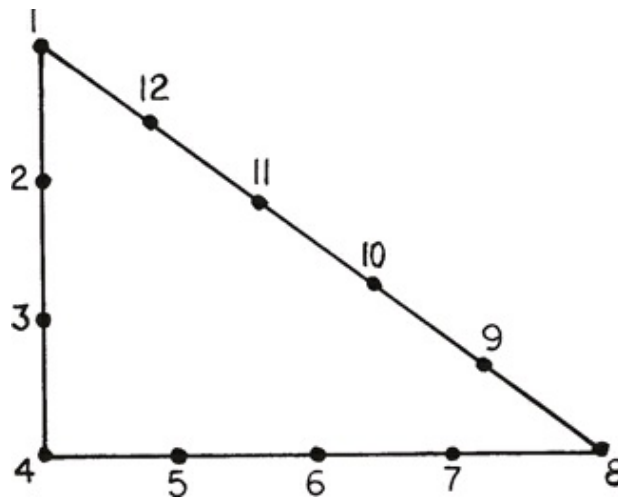
A similar test, also dating back to classical Greek times, can be applied to rectangular shapes. Each subject was asked to choose the rectangle he or she felt was the most perfect shape, with the greatest harmony between the short and the

long sides. With this test, an overwhelming number of people chose one particular rectangle, G, or its immediate and very similar neighbors, F or H. If you compare the ratio of the short to the long sides of the rectangle, you will find it to be the same ratio as the two parts of the previously divided line. Unconsciously, it is also the ratio found between the top of a standing person's head and navel, and the ratio from the navel to the ground. The pleasing proportions of the divided line and rectangle became basic to the development of Greek architecture and pottery of the period 550 B.C. to 350 B.C.

Another important mathematical feature that was developed for land surveying in ancient Egypt, and possibly came from earlier cultures, was the use of a knotted cord to measure both length and surface. The cord had 12 equally spaced knots, probably a cubit apart. A cubit is the distance from the elbow to the end of the outstretched middle finger, approximately 18" to 20". The cord is angled at the fourth and eighth knots, and it forms a right-angle triangle.



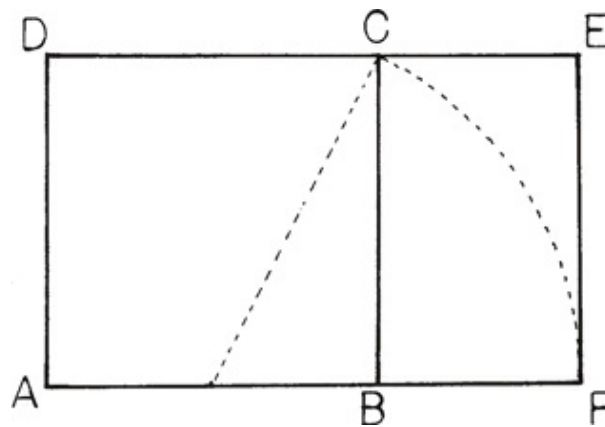
A series of different rectangles arranged with their ratios marked.



A knotted cord forms a right-angled triangle.

The right-angle triangle and knotted cord ideas were taken back to Greece by a philosopher, mathematician and olive oil tycoon named Thales of Miletus. He operated along the coasts of Asia Minor between 600 B.C. and 550 B.C., and in

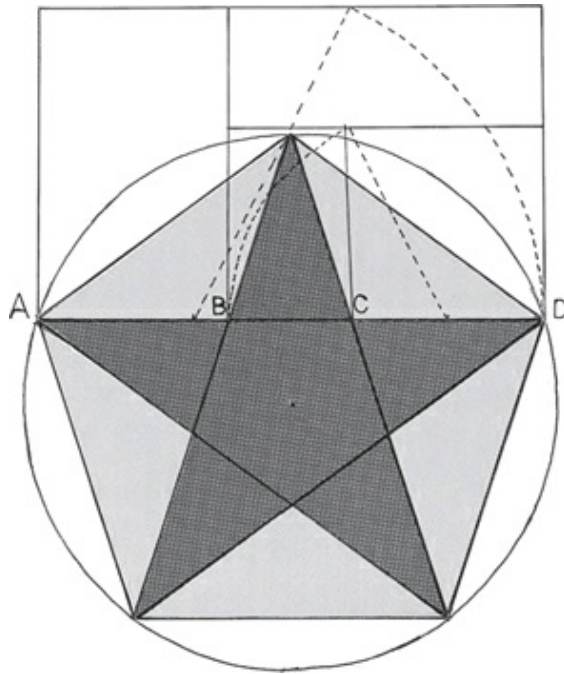
his travels, he came into contact with the old folklores of mathematics and astronomy. The Greeks at this period were a supremely logical group, and the knotted cord with its right-angled triangle became the focal point of an endlessly fascinating series of geometrical forms and relationships explored and debated by such men as Pythagoras, Eudoxus and later, Euclid. During this time, some of the world's finest architecture was built using simple geometry as a base. The science of arithmetic, with addition, subtraction, division and multiplication, was not developed until some time later.



The Most Favored or Golden Rectangle. To construct a Φ , or fie, rectangle, take a square (A, B, C, D). At a point halfway between A and B, mark the center of an arc whose radius touches at point C. The arc will cut an extension of line AB at point F. Raise a perpendicular from point F to meet an extension at line CD at E. The rectangle A, F, E, D has a ratio of short to long sides of 1:1.618.

But back to the line and rectangle. If you compare the two parts of the divided line or the two sides of the most favored rectangle, you would find that the longer is approximately 1.618 times as long as the shorter. In other words, the ratio between them is 1:1.618.

About the year 300 B.C., Euclid, the father of modern geometry, first noticed many interesting qualities about the number 1.618. Since then, it has always been considered to be an important number, and mathematicians have named it Φ (fie), pronounced fie. The artists of the Renaissance called it the Divine Proportion. Not only did the Greeks use the Φ (fie) proportion rectangle or Golden Rectangle for their architecture, but they also used the pentagon, which contains a number of Φ (fie) relationships, as a holy symbol.



Geometric shapes containing Golden Mean Relationships. The pentagon, or five-sided figure, a Greek holy symbol, and the pentacle, or five-pointed star, are symbols used in magic. All relationships can be expressed by Φ . It is easy to see why the Greeks thought the pentagon a perfect shape.

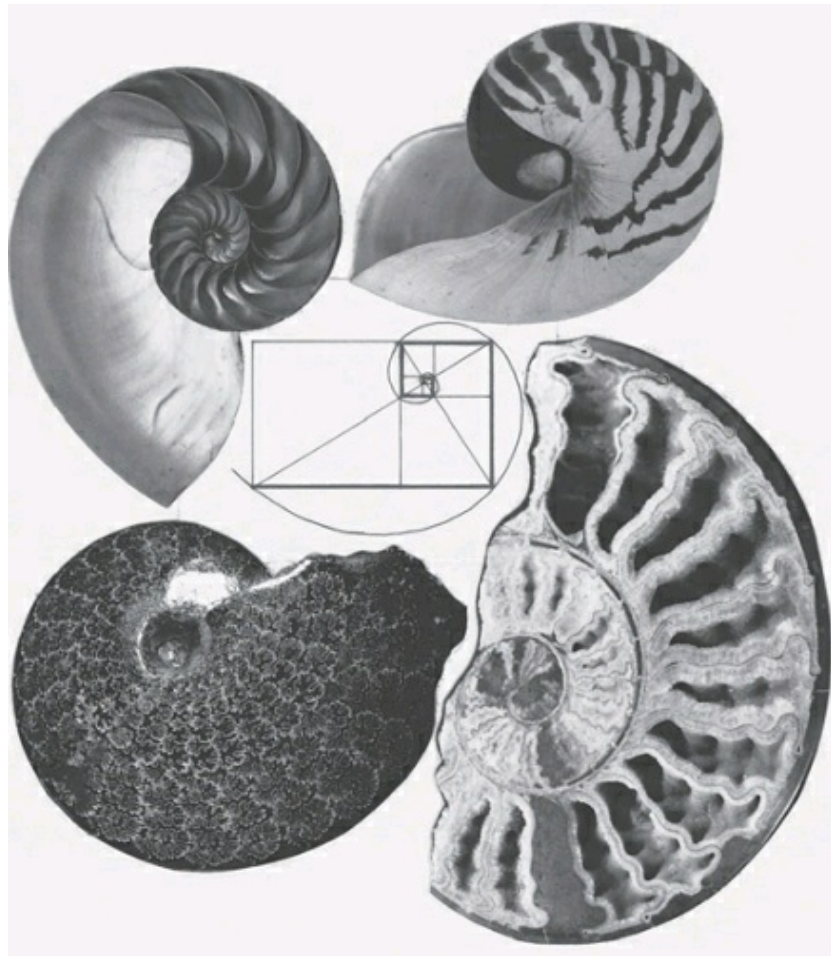
This fascinating number, which is also known as the Golden Mean, Golden Section, Golden Ratio, Golden Number or Golden Rule, is also a significant factor in the living world. We find that natural organisms, including the human body, contain an astounding number of Φ (fie) relationships. In preferring proportions based on Φ (fie), we are therefore following natural laws. These natural laws create intuitive preferences for pleasing forms and relationships.

Architects, artists, musical composers and craftsmen always have sought to establish pleasing relationships in their works, some of which can be expressed by ratios. Plans and drawings of the architecture of the past show how preoccupied architects always have been with the problem of ratio, not only of the overall shape of a building, but also of the smaller shapes within it. They considered the ratios of doors and windows and related them to the ratios of the outside walls. They also calculated the height, length and width of each room in relation to one other. A building was a complicated system of ratios. In order to make it possible to arrive at a pleasing set of proportions, they often related their measurements to Φ (fie). In many cases they found Φ (fie) by instinct, as many people do in the line and rectangle tests mentioned earlier. In other cases, all the relationships were worked out mathematically. In this way, they created structures whose ratios were related to each other and, through Φ (fie), to the living world.

Another series of numbers with a close connection to Φ (fie) is: 1, 1, 2, 3, 5, 8,

13, 21, 34, 55, 89, 144, etc. This series is called the summation series, since each succeeding number is the sum of the two that precede it. It is also known as the Fibonacci series, after Leonardo (Fibonacci) da Pisa (1170-1250 A.D.), the mathematician who first used it. There are a number of interesting things about the Fibonacci series. If you examine the ratios between any number in the series and the preceding one, 34 and 21 for example, and work out their ratio by dividing the higher number by the lower, $34 \div 21 = 1.619$. Repeat this with higher numbers in the series, $144 \div 89 = 1.6179$. You will notice that the higher you go in the summation series, the closer the ratio will be to the Golden Mean of ϕ (fie). Mathematicians know that however high you go in the series, ϕ (fie) is never reached exactly, but is remarkably close and consistent.

The summation series is not just an interesting series of numbers. As with ϕ (fie), these numbers are closely related to nature and are found in an uncanny and infinite number of places. If one looks at plants, such as daisies, chrysanthemums, pyrethrums, sunflowers and fir cones, it quickly becomes obvious that there are spiral patterns. In fact, there are two sets of spirals, one in one direction and one in the other. The number of petals, sepals or seeds differs from one spiral to the other, but they almost always relate to the adjacent numbers of the Fibonacci series. In a pyrethrum, you usually will find 21 right-hand spirals and 34 left-hand spirals. In sunflowers, different varieties will have combinations of 34 and 55 spirals, 55 and 89 spirals, or even 89 and 144. A fir cone has sets of five and eight, a daisy has sets of 13 and 21, and a small flower, like a ranunculus or buttercup, has two spirals in one direction and three in the other.

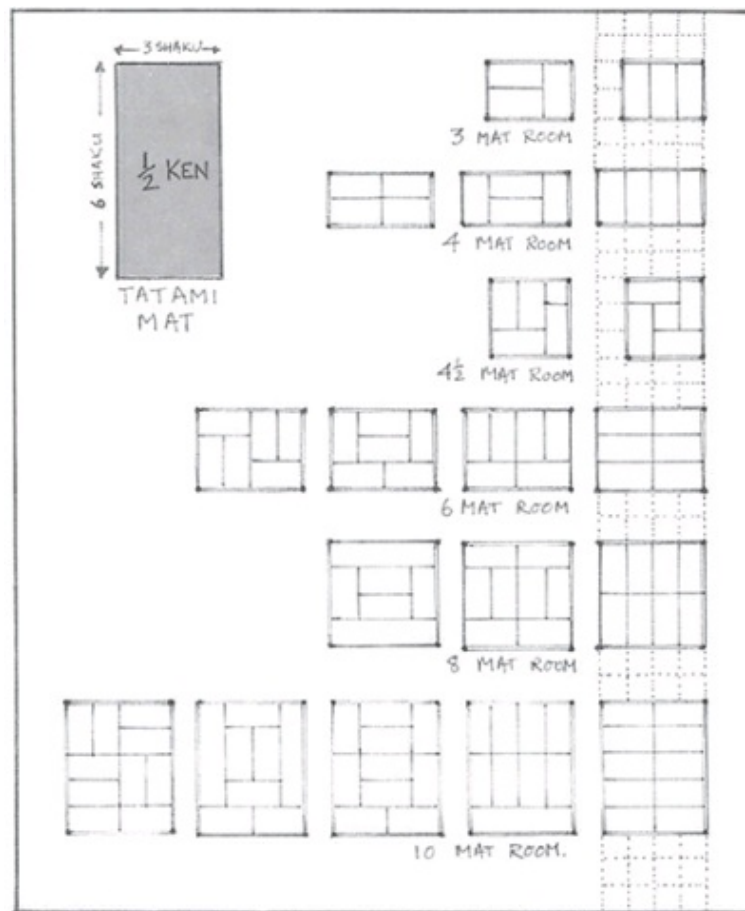


Relationships between the Golden Rectangle, logarithmic spiral, chambered nautilus shell and ammonites.

All these numbers are part of the summation series, which, is closely connected to the Golden Ratio ϕ (fie). We can see that many of the relationships that we could previously only sense can in fact be expressed and measured in mathematical terms. Nature is a logical system, and only a study of mathematics will reveal certain of its secrets.

The Golden Mean is not the only proportionate system used by man, of course. There are various others, the most recent of which is the Modular System of ratios designed for the practice of architecture by Swiss architect Le Corbusier. However, all systems have some similarity to either the Golden Mean or the Fibonacci series. Perhaps the most obvious of these systems is that used in the traditional architecture of Japan, where the controlling module for the size of rooms — and ultimately the size of buildings — is the tatami, or floor mat. The tatami is considered as the space needed for a person to live, which makes man the module. A tatami is a mat made of rice straw that always measures 3 shaku by 6 shaku, or approximately 3 feet by 6 feet. As you will notice, the mat has a ratio of

1:2, found early in the summation series. The size of the mat controls the room size, and consequently, one finds rooms sized as 3 mat, 4 mat, $4\frac{1}{2}$ mat, 6 mat and so on.

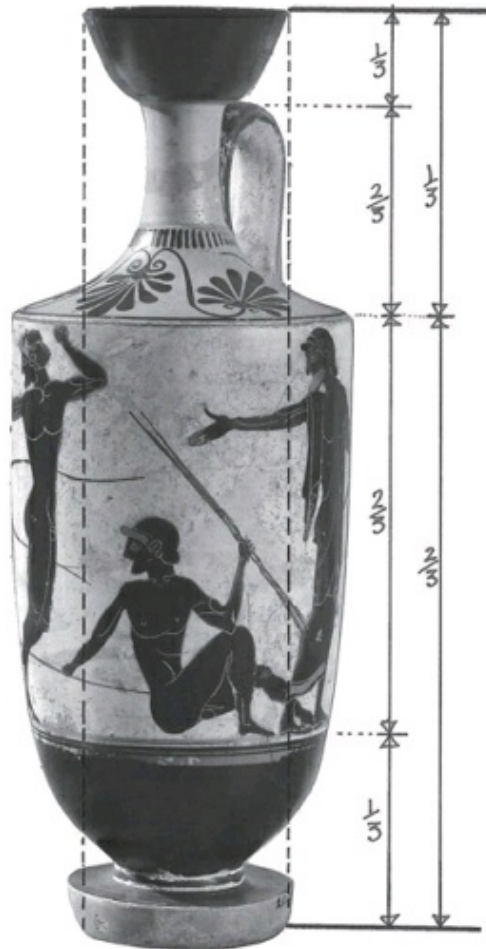


Placement of Tatami mats in traditional Japanese architecture.

This controlling module has the effect of giving the rooms and buildings great harmony, similar to the harmony seen and felt in the great buildings of classical Greece, such as the Parthenon and Erechtheum in Athens. Greek architecture is an attempt to create an image that, like Greek poetry, music, or ceramics, expresses the idea that proportion is one of the highest values of human life.

In the pottery of both ancient Greece and Japan, although outwardly the absolute antithesis of each other, we find strong mathematical relationships. To a large extent, the pottery associated with ancient Athens, generally called Attic pottery, was conceived and made according to preordained mathematical proportions and ratios. These were the same ratios that controlled the architecture and were based on the Golden Mean. The harmony between the building and the objects used in the building must have been quite delightful, since they related to each other and also to the users, and they were derived from mathematical principles based on the form

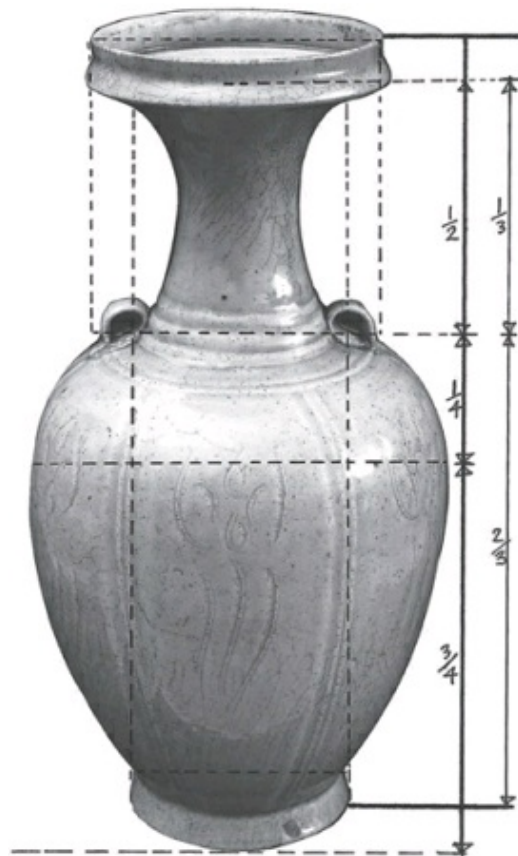
of man. The elegance and sophistication of aristocratic Greek life also was related to both the drawings on the pottery and the frescoes and relief sculptures that adorned the palaces.



The width of the widest part is equal to one-third of the height. The top and base are two-thirds of the width of the shoulder. "Lekythos," Greece, fifth century B.C., courtesy of the Montreal Museum of Fine Arts, Canada.

In Japan, unlike Greece, any mathematical relationship between pots and architecture is much more complex to discover. However, it is there, and it is a subject that could do with a good deal of research. To really understand these relationships, it is necessary to understand much of the background of Japanese aesthetics, particularly coming from the religions of Zen Buddhism and Shintoism, the two main faiths of Japan. They both relate closely to natural laws, and most people relate to both faiths, and through them to a love and deep intuitive appreciation of nature. Shintoism looks after birth and life, while Zen looks after death and afterlife. Zen is a derivation from Chinese Buddhism, brought to Japan in the eighth or ninth century A.D. Gardens, flowers and rocks were part of the meditative aspects of Chinese Buddhism. With the growth of Zen Buddhism,

particularly in the 14th to 16th centuries, garden making developed as a powerful art form. Although it appears to be quite natural, the Japanese temple or shrine garden is actually a heavily manicured and mathematically organized space. The placement of rocks is part of a geometric outline, usually equilateral or right-angle triangles. They are generally placed in groupings of three or five. Both shapes and numbers should be quite familiar. The overall effect is one of peace and harmony.



The width at the top is equal to the height of the neck. The width beneath the lip is equal to the width of the foot. The width of the form where the foot joins is half the width of the widest part. The widest part is approximately half the height. "Vase," China, 10th century A.D., courtesy of the Montreal Museum of Fine Arts, Canada.



Water Container," 18th century, Japan, Gray Shino Ware, courtesy of the Art Gallery of greater Victoria, Canada.

This harmony is further noted in the development of the teahouse and tea ceremony, chanoyu. The Japanese tea ceremony is the ritual celebration of the simple joys of life. This ritual evolved from the traditions of Zen Buddhism, which teaches the value of limits by the discovery of “greatness in little things” (Okakura, *The Book of Tea*). It is a meditative process, bound up with natural law, that recognizes and worships the imperfect, purposely leaving something unfinished for the play of the imagination to complete. Teahouses are usually set in gardens, often with wall openings or windows that give a tantalizing partial view of the garden. The relationship of inside and outside is very important here.



Classical forms in Greek architecture and pottery.



“Flower Vase,” Edo period, 1615-1868, Japan, Iga Ware, courtesy of the Art Gallery of Greater Victoria, Canada.

Bringing the outside in brought about the Japanese styles of floral arrangement. Originating as altar offerings in the temples, floral art contained many symbolic meanings in various geometrical relationships. The flower containers probably had a mathematical relationship to the space in which they were used, as did the utensils of the ceremony, creating an extraordinary harmony within the small space of the teahouse.

The tea bowl also had a special relationship with both the space and the user. The teahouse combination of objects of beauty and natural simplicity inside a space of harmonic relationships, plus the peace and serenity of a meditative process, must have given the Samurai warriors of the feudal lords a sense of total tranquility and “thusness” before battle. It does much the same for businessmen today, and there is still the same reverence for beautiful objects being used in this way.

The tatami mat module has a relationship of 1:2. This is the same ratio as the standard 8-foot-by-4-foot sheet of wallboard, plasterboard or plywood used today as the basic forms of interior wall covering. To some extent, this is the module that has standardized much of the world’s contemporary domestic architecture. Standard ceilings are 8 feet high, for example. For economic purposes, both the material and the time used in cutting and fitting rooms and buildings are often designed with this module in mind. In theory, we should have much better-looking house architecture than we actually do, since the module has a harmonic relationship.

It would be an interesting exercise to make pots designed to fit into contemporary architecture while using pleasing proportional systems like the Greeks and Japanese did. Most urban living environments are a clutter of unrelated forms since they are a combination of what is available for a given purpose but with little continuity. They have little or none of the serenity that seems necessary to and compatible with a busy life away from the home, be it fighting battles or doing business. If the relationship between objects and environment could be made more harmonious, it might well have a very beneficial effect on the psyche of the people who use them. This is not necessarily an impossible limitation on aesthetic choice. In music, the composer has only a limited scale of notes of predetermined value, but the possible configurations within these limits is almost infinite.

So what do all these proportionate systems have to do with making pottery? One can look at this in three ways. First, the object itself. All three-dimensional forms have a relationship of height to depth to width, even in the simplest thrown

cylinder. As soon as one alters the form by any articulation or movement, one alters the basic proportions and thus the relationship between one part and another. When one adds spouts, lids, handles and feet, the relationship becomes more and more complex. The proportion between the parts of the object, in conjunction with the basic form, becomes the power that makes that object pleasing or otherwise. Second, we must be aware of the proportion of the object in relation to its function. Some objects need to be big, and some need to be small. Third, one can look at the object in relation to other objects, as well as to the space in which it will serve its function.



Forms featuring proportions developed for both visual and functional ends.

The considerations of proportion, in conjunction with the physical feel when holding the form, can add immeasurably to the qualities that any object may have. To suggest conformity to any particular pattern of ratio and proportion would seem to suggest sameness; it does not. By having an awareness of proportion and its relationship to the work that we do, and to the environments that will house our works, we can and do enhance the quality of the surroundings, and, by extension, the quality of life. Although a pot with a good form and proportion isn't necessarily

more efficient than a bad one, it is certainly infinitely more pleasant to live with.

As Sir Herbert Read states in his book, “The Origins of Form in Art”: “What I am searching for, in conclusion, is some formula that would combine individual initiative with universal values, and that combination would give us a truly organic form. Form, which we discover in nature by analysis, is obstinately mathematical in its manifestations — which is to say that creation in art requires thought and deliberation, But this is not to say that form can be reduced to a formula. In every work of art it must be re-created, but that too is true of every work of nature. Art differs from nature not in its organic form, but in its human origins: in the fact that it is not God or a machine that makes a work of art, but an individual with his instincts and intuitions, with his sensibility and his mind, searching relentlessly for the perfection that is neither in mind nor in nature, but in the unknown. I do not mean this in an otherworldly sense, only that the form of the flower is unknown to the seed.”



Gaudí Apartment building, Barcelona. Photos by Liz Conway.

CHAPTER 9

THOUGHTS ABOUT SURFACE



Perhaps the most important part of a teacher's role is that of catalyst, stirring imagination.

In this book, I am not particularly concerned with the making of food-safe surfaces for functional pottery. I have covered this topic in my first two books, "The Ceramic Spectrum" and "Functional Pottery." Here, I am concerned primarily with the creative approach to surfacing and glazemaking for nonfunctional ends.



Brush decoration with pigment over terra sigillata. Photo by Stan Funk.

The ceramic surface has dual polarities — functional and decorative. At one end of the scale is the hygienic, fault-free glaze coating, generally preferred for most food-safe functional ware. At the other end, the nonfunctional surface may be just about anything that one can get to stick to the surface of clay!

For some reason that I've never completely understood, the area of glaze development is one that frightens off many people. They tend to avoid exploring this part of the medium, which I view as one of the most crucial and individual aspects of the whole ceramic process. It is usually what is done to the surface that establishes the personality of the piece and the individuality of the maker. How come we are all born individuals, yet so many die as clones? Perhaps people are intimidated because of its description as “ceramic chemistry” or “glaze calculation,” when it is far closer to “clay play” or “alchemy.” Perhaps the “instant” solution, like instant coffee and TV dinners, pervade the potter's thought process, and they have become dependent on someone else to do the work. Perhaps it is the reluctance to risk ruining their work. One doesn't find much challenging work where the artist isn't challenged in the process and risks aren't taken.

Although it is complex in the breadth of possibilities and variations, glaze development is not really that complicated. One can easily learn to make glazes with little or no previous chemistry background. If one thinks of it more as related to cooking, perhaps the intimidation factor can be eliminated. It is a matter of knowing your ingredients and how they might affect the total mix. It takes time, but, then, so does learning to cook. Like cooking, the more one plays with ingredients, the quicker one can be creative in the process and achieve purely personal surfaces rather than using someone else's recipe that never totally satisfies.

For those who have little experience with the ceramic material world, perhaps the most difficult part is in knowing where to start exploring. The easiest way to develop an understanding of materials is simply to make clay test tiles, bisque fire them and then paint them with each individual material. First, mark the back with the name of the material, or some code, mix the material with a small amount of water to a brushable state and apply the mix to the tile in thin to thick variations. Fire tiles to a variety of temperatures, and observe the results. The next stage is to take materials that melt and add them to materials that may be dry, mix the tiles in equal parts, apply as before, fire them, then observe the results. This is the empirical method of glaze development in use for about 5,000 years; it is the basis for mankind's ongoing ceramic research — learning by doing. It does take time, but it is an important part of the total ceramic process. Once learned, it is seldom forgotten, and it forms the basis of whatever ceramic exploration one might do, in

whatever method one may choose to do it. Glaze calculation is not very effective without a solid materials foundation.

The more simple material mixing that one does, the more one understands both the materials and the process. Always keep track of results in a notebook. I refer to this as elementary glazemaking, since one can achieve much with few resources. When I first started teaching elementary glaze-making, I set up a situation for the students where they were limited to the clay from a local creek, and their only other supply source was a grocery store. They were to come up with a variety of glazes. There are many things on grocery store shelves that will melt to form glass. Soap powders, baking materials, toothpastes, salt and water softeners are all examples of materials that will melt under the effects of heat. If one reads the information on the boxes, it will quickly be found that the contents are basically borax, boron, sodium, potassium and phosphorous — also the basic elements to be found in many, if not most, glazes. Mixed in varying proportions with sedimentary clay from a creek, they can produce quite beautiful glazes. One can't get much simpler than that! Try them at different temperatures such as cone 04, cone 5 and cone 9, observe the results, and make good notes. They may not produce the ultimate dinnerware glaze, but they are often much more interesting. By building a knowledge base of the behavior of individual materials, one can quickly familiarize oneself and make educated guesses on how things may work together. Simple half-and-half (or even one-third, one-third and onethird) mixes can produce an unlimited array of interesting surfaces and textures. Adding variations of color can greatly further the interest. If one later becomes interested in glaze calculation, this accrued body of empirical knowledge gives the basis for intelligent decision making in more complex glaze making.



Old doon with bituminous paint.



Examples of textured glazes. Photo by Janet Dwyer.

One can make good functional pottery at a temperature range from about cone

010 up to cone 14, depending on such factors as clay, glaze, decoration or surfacing process, firing process and kiln. It would be futile for me to even think of suggesting all of the wonders and all of the problems that this range makes possible, even if I had the ability and knowledge. So many things are relevant to the individual that only the individual can solve them. Making pottery, remember, is a very private affair: One doesn't have to do what everyone else does! If one chooses to use glazes that are dry, matte, vellum, satin, silky, glossy, glassy, pitted, crazed, crawled, bubbled or volcanic, this is a personal choice. The buying public will soon tell the maker if they don't like the choice of surface. Whether that glaze is suitable for the use in hand is yet another question.

Without being dogmatic, to satisfy most purchasers of functional pottery, glazes for functional wares should really be hygienic. This usually means fault-free and sterile. However, if one agrees that crazing, pinholing and crawling are faults, then how does one reconcile the beautiful Oriental uses of glazes that have these faults and make use of them in creative ways? Celadon and chün glazes with crackled patterns, shino and tenmoku glazes with pitted surfaces like pigskin, and nuka-type glazes, which use crawling to such wonderful effect: What do we do about them? As I said earlier, it is a personal affair, and if one can justify the uses of faulty glazes to oneself and one's customers, then that is all that is needed. A good dishwasher or hot water and soap will render almost any glaze hygienic.

The only glaze fault that should **not** be tolerated under any circumstances is shivering, where the glaze is slightly too large a fit for the clay; it can cause sharp slivers to come off the edges or rims of pots, easily dropping into foods. These glaze flakes could be potentially lethal, particularly to small children. Shivering is most prevalent in glazes with a high content of lithium-bearing materials such as spodumene, lepidolite, petalite, amblygonite and lithium carbonate. Although suitable surfaces for functional ware are very important, they are generally somewhat limited in their aesthetic potential because of what they have to do to satisfy the client and government regulatory bodies on safety concerns. Certain ceramic materials used to create vibrant and exciting color and surface potential have basically been eliminated from the functional potters' palette because of their toxic or hazardous nature. The prime offending materials are lead, barium, manganese, uranium, chromium, cadmium and selenium. They can all produce glazes that are made dangerous by contact with food acids. If in any doubt, do not use glazes containing these materials for pottery designed to be eaten from, drunk from, cooked in or used to store acidic liquids, like fruit juices, wine or vinegar. There are safe ways to use these materials, but they are complex and outside the

scope of this book. Further information may be found in “The Ceramic Spectrum” and other books on glazes and glaze development. Since the problem materials are few, they shouldn’t hamper the development of a wide palette of surface and color.



Tree bark of *Pseudotsuga menziesii* (Douglas fir).

FLUXES

Color and ceramic surfaces are intimately connected. Fluxes have the most effect on color development in glazes. The following list outlines the most powerful fluxes and how they might affect color development. Combinations of fluxes with colorants form a great starting point for highly textured and vibrantly colored nonfunctional surfaces.

ALKALINE OR ALKALINE EARTHS

Alkaline glazes have a high percentage of one or more of the compounds of sodium, lithium and potassium. They are generally glossy, glassy, fluid, brilliant

and clear. Due to excessive expansion and contraction, they frequently craze and are difficult to fit to a clay body. It is possible to make a matte alkaline glaze, but other adjustments generally have to be made that will dull some of the brilliance of the color. Lithium crazes less than sodium or potassium, and, in small amounts, allows a less-fluid glaze while still giving intense colors. Low levels of alumina in the glaze are also necessary for the best colors. Most alkaline glazes also contain a mixture of other fluxes (lead and boron, for example) in order to produce a more functional glaze.

In glaze batches, alkaline glazes are likely to be high in the following materials:



Parrotia persica (Ironwood tree) leaves, fall color.

Alkaline Glaze Components

Sodium-Based Glazes	Lithium-Based Glazes	Potassium-Based Glazes
Nepheline Syenite	Lithium Carbonate	Potash Feldspar
Soda Feldspar	Spodumene	Potash
Alkaline Frits	Lepidolite	Pearl Ash
Borax	Petalite	Niter (Saltpeter)
Soda Ash	Alkaline Frits	Most Wood Ashes
Cryolite		Fluorspar
Sodium Nitrate		
Sodium Silicate		

LEAD

Lead may be used as the only flux in a very low-fired glaze (as low as cone 022). It is a strong flux, and lead is used the world over for earthenware glazes. It produces smooth, bright, glossy, blemish-free glazes. Lead has a fairly low coefficient of expansion, and it is relatively easy to fit to clay bodies. It can be used in glazes varying from matte to shiny, and from clear to opaque. It has a very strong and pleasant effect on most colorants, allowing pure color to develop.

Lead should not be used in reduction at any temperature, as it converts to toxic lead oxide. It also will cause the glaze to bubble and blister. Similarly, lead should not be used for either oxidation or reduction in glazes to be fired above cone 6. At temperatures above cone 6, lead will become volatile and leave the glaze as a gas.

Lead frits are compounded industrially as monosilicates and bisilicates. Lead monosilicates are soluble and therefore liable to be toxic. Lead bisilicates are usually insoluble and usually safe, provided that you don't add any other heavy-metal colorants, such as copper and chromium, to them.

Transparent lead glazes have a tendency to be yellowish, so alkalines or boron should be added for a perfectly clear glaze. Colors in lead glazes usually have a soft, warm look. Transparent lead glazes over red clay look deep red-brown.

In glaze batches, lead oxide is usually provided by high lead frits, white lead (carbonate), red lead and lead silicates.

BORON

Boron can be the main flux in a glaze, and it is similar to lead and the alkalines in its power. It is a strong flux from the lowest to the highest temperatures, although it may give a weak, somewhat soluble glaze. In leadless glazes with high boron, use three or more fluxes to give glazes durability if they are to be used for domestic ware. Boron frequently produces a milky-blue opalescence. It also may cause a streaked, cloudy quality and mottled effects with colorants. Boron has less expansion than the alkalines, and it is often used in conjunction with lead to produce hard, smooth, glossy, transparent dinnerware glazes. In reduction, boron gives a slight greenish color to the base, but it still can produce brilliant colors.

In glaze batches, boron usually is supplied by calcium borate, boron frits, boric acid and borax.

MAGNESIA

Magnesia in glazes has a strong effect on color and texture, even when it is used

in comparatively small amounts. In low-fire glazes, the magnesium acts as a refractory and may make the glaze cloudy, with sugary, matte textures. In high-fire glazes, smooth, buttery glazes may result.

In glaze batches, magnesia may be provided by talc (steatite or soapstone), dolomite and magnesium carbonate. Reticulation glazes, as shown on page 166, need high percentages (30 percent plus) of magnesium carbonate to develop extensive decorative crawling.



Phormium tenax 'Yellow Wave' (New Zealand flax. With markings.

ZINC

Zinc is always used with other fluxes in a glaze, but often, its percentage is quite high. In small amounts, zinc acts as a flux. It was used to replace lead oxide in Bristol glazes in England to prevent lead poisoning. In large amounts, zinc can cause matteness.

Zinc has good properties of expansion, hardness and durability. It also acts as an opacifier in both oxidation and reduction. But, zinc affects some colors in peculiar ways. It turns chromium to brown, cobalt to gray-blue and iron to muddy yellow. Zinc adds whiteness to the base glaze and has the effect of turning colors into opacified pastel-like colors. Add calcined zinc to high-zinc glazes to prevent crawling and peeling of glaze due to high wetdry shrinkage of raw zinc oxide.

In glaze batches, zinc is provided by zinc oxide.

BARIUM

Barium acts Barium acts as a strong flux, usually producing soft, silky or frosty mattes. When used in large amounts, it sometimes causes the glaze to run.

When boron is present in the glaze, the barium forms a glassy surface. Barium with lead in low-fire glazes can produce smooth mattes. Very high amounts of barium in high-fire glazes usually produce smooth, dry mattes. Barium often gives a base glaze a more noticeable bluishgray color in reduction due to the way that it pulls iron from the body. Barium produces very brilliant colors in both oxidation and reduction.

The only practical source of barium is barium carbonate.

STRONTIUM

Strontium and barium have similar effects in glazes and the development of color. Strontium may be used in larger amounts than barium, at lower temperatures, and it is an active flux from cone 04 to cone 12.

Although it is considerably more expensive, strontium is a nontoxic material that may be used in place of barium where toxicity of materials is a potential problem. If strontium is used to replace barium, the volume of strontium should be 75 percent to 100 percent barium. It is also used as a body flux for a wide temperature range.

Strontium is supplied by strontium carbonate.



Acer palmatum "Osakazuki" (Japanese maple), fall color.

TRIAxIAL FLUX VARIATIONS

80% BASE MIX RECIPES

Material	Cone 6 Shiny to Matte	Cone 8- 10 Matte Variations	Cone 8- 10 Shiny Variations
Feldspar	36	36	36
Kaolin	12	12	12
Calcium carbonate	16	12	12
Ball clay	—	12	—
Silica	16	8	20
TOTAL	80	80	80

Triaxials and Flux Variations are two separate approaches to glaze development explained in my book “The Ceramic Spectrum,” The TRIAXIAL FLUX VARIATION 172 unites the two approaches to form a very interesting and almost foolproof method of glaze development that produces a very personal glaze result, depending on the amount of knowledge behind the decisions of which fluxes to use. The concept is that a basic group of materials form 80 percent, or the core of the glaze, and stays constant. (See 80% Base Mix Recipes). To this basic group is added a variable amount of fluxes that make the remaining 20 percent to a total of 100 parts. I have given 6 examples of mixes that have been tried to great effect in each of cone 6 and cone 8 to 10 bases. The triangular chart shows which materials would be in each of 21 separate glaze tests. The glazes would be somewhat similar to each other, but they will be like variations on a theme. It is often quite astounding just how much a small change in materials mix can affect the final result. Once suitable glaze bases are developed they may be colored and opacified in various ways. (See Chapter 10). The secret to the selection of which fluxes to use lies in what colors are desired. For instance, if purple, lilac and mauve are desired, the flux groupings that contain dolomite, talc or magnesium mixed with

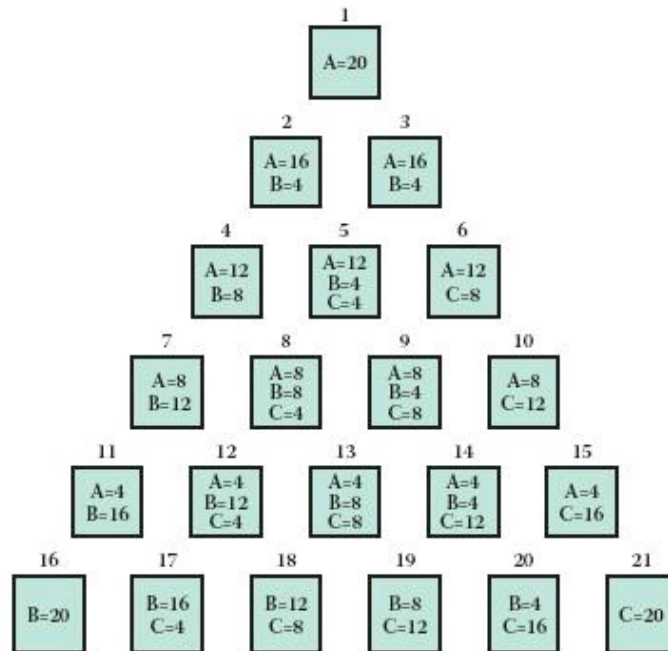
cobalt would be the most favorable. For high-temperature yellows, a flux grouping that contain barium, dolomite and red clay would be a good starting point. For turquoise to greens, combinations of lithium, wollastonite and barium would give the most likely direction when copper is used as a colorant. The more one explores, the more one learns.

Without a teacher handy to explain verbally, it may seem a little confusing, but it is really very easy. From each set of tests there will be 21 glaze variations. The boxes shown on the Triaxial Flux Chart each represent a glaze with a constant 80 percent base mix and a changing amount of the fluxes.

Remember: This is a structural framework, and of the major decisions are all yours. As long as you get the mathematics right, it should all work out quite nicely. The possibilities are limitless. Each box numbered 1 to 21 represents 80 percent glaze base and 20 percent variable flux. In Box 9, for instance, you should have 80 percent glaze base, 8 percent Flux A, 4 percent Flux B and 8 percent Flux C. In Box 13, the mix would be 80 percent glaze base, 4 percent Flux A, 8 percent Flux B and 8 percent Flux C.

The three fluxes to be used in each triaxial are listed as A, B and C. They can be any single flux. You also can add more fluxes if you want smaller amounts of extremely active ones, such as cryolite, fluorspar and bone ash, by simply dividing the amounts in each and adjusting the mathematics, so that points A, B and C could each be made up of equal or differing ratios of two fluxes.

TRIAXIAL FLUX VARIATIONS CHART



CONE 6 TRIAXIAL FLUX VARIATIONS

Variation	Flux A	Flux B	Flux C
1	Lithium Carbonate	Wollastonite	Wood Ash
2	Bone Ash	Alberta Clay	Cadycal 100
3	Any Frit	Barnard Clay	Barium Carbonate
4	Zinc	Lithium	Cadycal 100
5	Barium	Dolomite	Cadycal 100
6	Dolomite	Talc	Magnesium Carbonate

CONE 8-10 TRIAXIAL FLUX VARIATIONS

Variation	Flux A	Flux B	Flux C
1	Zinc	Barium	Cadycal 100
2	Lithium	Dolomite	Barium
3	Wood Ash	Talc	Cadycal 100
4	Barium	Spodumene	Barnard Clay
5	Petalite	Barium	Fusible Red Clay
6	Dolomite	Talc	Magnesium Carbonate

PATINATION

Patination is the name given to the changes that usually occur on metal surfaces as they age, alter and decompose. It often is used to describe the familiar green coloration, or verdigris, that occurs on copper roofs or ancient bronze sculptures. Since the ceramic surface can be developed in an almost limitless fashion and it employs mainly metallic oxides to do it, it is reasonable to expect that there are many ways to explore these thin coatings.

Patinas are particularly appropriate for use on textured surfaces or sculpture to give great visual depth to forms and markings. They usually are darker than the clay body, but they can be developed as a light patina to emphasize depressions on a dark clay. In this case, they probably would include white clays, pale terra sigillatas and light-colored opacifying agents.

Patination is best done at temperatures above cone 4, where the colorants begin to fuse with the clay.

PATINATION BY COLORANTS

Almost any mineral colorant can be mixed with water and a little gum or a terra sigillata and applied to the surface of an object. With a sponge. The colorant will find cuts, lines and depressions to fill, where the color will become deeper or lighter, depending on the colorant selected for the job.

Once a full sponging has been done, a damp sponge or cloth can be used to

remove any excess from the surface so that maximum contrast can be seen between the surface and the depression that holds the color. The following colorants are particularly useful for patination. Some are best applied over white clays or porcelain, or over a white slip or terra sigillata.

Colorant Patination or Colorant Washes

Desired Color	Colorant Choices
Red-Brown	Iron Oxide, Ochre, Umber, Iron and Tin Mix
Dark Brown	Manganese, Iron and Copper Mix, Nickel
Greens	Chromium, Titanium and Cobalt Mix, Prepared Stains
Bronze-Gold	Manganese 7 + Copper 3 Mix
Blues	Cobalt, Cobalt and Tin Mix, Prepared Stains
Yellows	Rutile, Rutile and Tin Mix
Oranges	Rutile and Iron Mix, Iron and Tin Mix



Gunnera tinctoria (Chilean rhubarb).

PATINATION BY FLUXES

To achieve patination by fluxes, make thin solutions of fluxes mixed with water and apply them by sponge in the method described in Patination by Colorants. Fluxes that work well include frits, calcium borate, barium/lithium mixtures and mixtures of calcium borate with rutile.

PATINATION BY GLAZES

Most glazes can be used to emphasize highlights and depressions in the surface.

Where a colorant patina usually will be matte in surface, a glaze patina usually will be glossy. Patination can be done with many forms of glazes, particularly those that have dramatically different characteristics when either thick or thin.



Amoracia rusticana variegata (variegated horseradish).



Skeletonized *Magnolia soulangiana* (saucer magnolia) leaf.



Swan feathers. Photo by Gary Woodburn.



Vinca minor aurea and Acer palmatum 'Seiryu' (Japanese maple) leaves.

TEXTURAL VARIATIONS

The ceramic surface can be made in almost any texture, from ultra-smooth to extremely coarse, and any quality in between.

The smooth surface usually comes from a well-matured glaze, from superb burnishing or from a terra sigillata finish. The coarse surface can be physically rough from unmelted materials in the glaze or clay, or from additions of coarse materials in slips or in the glaze itself. It can have rough, agitated surfaces caused by additives that boil and bubble, leaving cratered, erupted, moonlike or volcanic skins. Varying amounts of silicon carbide in different mesh sizes will do this.

The ceramic surface also can have coverings that may pucker and fissure during the firing process. These may be caused by firing to where the glaze has fused to the clay but has not reached maturity. It also can happen by accidental or induced drafts during the cooling cycle. The surface may simply have granular materials within the glaze that bleed or pool during the firing, giving visual rather than physical texture.

CLAY ADDITIVES

Clay additives may be colored or noncolored materials. Many clay additives also may be used as glaze additives.

Sand

Colored sand, such as iron-stained sandstone or black volcanic beach sand, as found in such places as Hawaii, the Greek islands or other volcanic areas, can be mixed with clay or clay slip.

Sand larger in grain size than 50 mesh can cause problems in the clay due to quartz inversion.



Sandstone rock face, Saltspring Island, British Columbia.

Grog

Grog is prefired clay that has been ground up to be used as a textural additive to clay. Grog can be made of different clays, brick dust or ground-up, colored clay slips. It can be colored with oxides, carbonates or body stains that have been fired, broken, ground up and screened through a 30-mesh sieve. The colored grog can then be added to the clay or slip. Depending on the glaze, it will bleed through to give spots of color, or, if the material melts sufficiently, it will create streaks and tears.

Granular Colorants

Some colorants are commercially available in a granular form, such as rutile, ilmenite and manganese. If you are living close to a mining area, it is often possible to get mine tailings in a powdered form, which may contain very interesting mineral ores. These can all be added to clays to develop unusual effects. Surfaces reminiscent of volcanic lava flows can be developed using granular manganese. The manganese will start to become molten at about cone 4 to 6, and it will ooze through the body. Mid- to high-temperature clays are needed; light stoneware, porcelain or colored porcelain give the best contrast with the dark manganese rivulets. Care must be taken to make sure that the work does not fuse itself to the kiln shelf as a result of the flowing molten manganese. Setting the piece on a slice

of insulating brick covered with a kiln wash or a dusting of either silica or alumina hydrate should eliminate this potential problem.



Petasites japonicus giganteus (coltsfoot).

Burnout Materials

Many organic materials may be put into the clay with the intention of having them burn out during the firing, leaving various textures behind. Straw, coffee grounds, ground nutshells, corn husks, sawdust and so on may be used for this purpose. Some low-fusion inorganic materials, such as perlite, expanded vermiculite, nylon or fiberglass are also used, not only to develop texture but also to add fibrous strength in the working stages. Fiberglass should not be used as an additive to clays that are to be thrown, as it is likely to cause lacerations to the hands during the throwing process.

GLAZE ADDITIVES

Many of the materials already mentioned may be used as glaze texture additives. When added to glazes, sands, grogs and granular colorants usually give a quite different effect from those that occur when they are added to the clay. This is because they have a more immediate action on the glaze fusion. The volume of

additive to glaze will vary according to the desired results, but between 5 percent and 10 percent of most of these materials will have a marked effect.



Weathered wood.

POWDERED MATERIALS

Many materials in their powdered form may be sprinkled, heaped on or even thrown on in a slightly moistened form, so that when the work is fired, a variety of surface enrichment takes place. Many crystalline, crackled, pooled and crawled decorative effects may be achieved in this way. Of all the materials normally used by ceramists, the most useful for powdered applications are as follows:

Powdered Applications

Desired Effect	Powders to Use
Crystalline Effects	Lithium, zinc, titanium, rutile, ilmenite, chromium and copper
Crackled Effects	Nepheline syenite, lithium, borax, amblygonite and frits

Pooled Effects	Frits, calcium borate, cullet or broken glass, glass beads and enameling beads
Beaded Effects	Enameling beads fired until their slumping point and feldspar
Crawled Effects	Powdered clay or slip, over a high-gloss glaze or zinc, or magnesium carbonate

Volcanic and pitted surfaces can be developed through the addition of medium-grind silicon carbon to the glaze, in additions of 3 percent to 5 percent. This will also cause some reduction to take place, even in electric kilns, and colors will be affected accordingly.

Other cratered effects may be achieved by placing granular salt directly on the ware and firing to cone 8 to 10. This works best with high-silica clay bodies, where the longer the firing, the more active the cratering.

Colored cratering can be achieved by mixing common salt and soluble mineral colorants into a solution with water, spraying onto bisque or greenware, and subsequently firing to cone 8 to 10. Salt (sodium chloride) may be sprinkled on surfaces that are to be fired as low as cone 08 with very interesting effects.

There are many other materials that could be used. Discovering them is merely a matter of finding the time to experiment with them all.



Echeveria elegans (hens and chicks).



Pink plant drawings.



Hosta (Tardiana group) 'Halcyon' (hosta).



Hakonechloa macra 'Aureola' (hakone grass).

CHAPTER 10

CONSIDERATIONS OF COLOR



**“All colors are the friends of their neighbors
and the lovers of their opposites.”**

-Marc Chagall

For the last 40 years, most of my personal research, writing and teaching has been in the areas of ceramic history and ceramic glaze and color development.

Starting my artistic life as a student painter/ printmaker gave me certain expectations of working with color that comes in tubes. Unless you mix the contents of different tubes together, what you see is what you get! There is sometimes a little darkening or lightening as the paint dries, but not much.

On the other hand, glazes and ceramic color change wildly for a number of reasons. Understanding how and why ceramic materials do what they do, and how to control them, has been the age-old nemesis of potters. Even ceramic glaze calculation doesn't tell one much until one has a solid understanding of the behavior of materials under varying degrees of heat in differing kiln atmospheres. Even then, calculation will tell almost nothing about ceramic color development. Gaining this knowledge is a lengthy undertaking, but unless one works at it, it will always remain a mysterious and frustrating part of the ceramic medium.

THE SCIENCE OF COLOR

Surface and color are so integral to the form that they should all be considered together from the beginning onward until the final object is realized. One can, of course, use recipes from magazines or books, but one doesn't learn much about the behavior of materials that way. What could be a truly and completely original piece becomes dependent on someone else's surface and color thoughts to

complete the form. It is a little like making the canvas oneself, but having another person do the painting.

I ventured into the area of ceramic glaze and color research out of sheer frustration. As a painter, I could squeeze paint out of tubes and mix the colors I wanted. As a young potter, the only glazes that I knew were tenmoku, celadon and high-alumina matte, the regular trio of glazes in use by the vast majority of contemporary potters worldwide at that time. Nice as these three glazes are, I felt as though I was being caged into a monotone world. I craved color, but in the late 1950s, little ceramic literature existed about this area of the medium. Being an inveterate museum-goer from childhood, I knew that there was much more color out there historically than I saw in work of the present time. I knew that ceramic color was possible; I just had to find out how. Since I had always had an interest in rocks, minerals and geology, I started to think of ceramic glazes as being extensions of geology rather than a coating over clay. Tenmoku is related to hematite, celadon is related to jade, high-alumina matte is related to pegmatite and the volcano is the kiln!



Malachite.

Suddenly, I realized that we are putting thin films of different types of rock on our pots. It may not seem like much, but to me it was a revelation. I felt like Archimedes in his bathtub! I started to look carefully at colored rocks in the geology museum and realized that the labels beside the samples had chemical notations beside them. I began to relate the colored rock or mineral to the ceramic colorants they contained. Rocks are either predominantly acidic, which affects a

colorant in one direction, or alkaline, which affects it in another.

The photographs of malachite (acid), and turquoise (alkaline) show these differences. They both contain similar concentrations of the copper colorant. I then progressed to looking at crystals in rocks, particularly rutile or impure titanium. I had unlocked a secret trio — acid, alkaline and crystal — that helped me to understand how it all comes together and how to go about finding the colors that I wanted from a painter's viewpoint.

If I want to know about surfaces that are lustrous or iridescent, mineral samples will help here, too. The iridescent surfaces that one often finds in raku glazes or reduced low-temperature lusters, for instance, all can be found by looking at copper ores, such as peacock ore. In fool's gold, or pyrite, luster comes from iron.



Turquoise.

Using solid mineralogy as my base of studies, rather than abstract or theoretical glaze calculation, opened the door to a whole new world. I could now explore how to make any color that I wanted. Over time, and through many thousands of glaze tests in my glaze courses, I was able to develop an understanding of color that allowed me to work the ceramic surface as a painter might. I certainly don't always do that, but it is nice to have the option.

I was able to put together a full chart on color development in a way similar to what a painter would be able to get from an art supply store. I published a number of articles on my research and findings and was asked if I might turn them into a book. That book is "The Ceramic Spectrum," first published by Chilton Book Company nearly a quarter century ago. Because it is a subject with no end, one can

just keep on learning through experimenting, following hunches and searching for the ever-elusive gem of a glaze or color. I've experienced at least a half-million glaze tests through my teachings and personal research.



Low-fired reduced luster, Jacques Sicard, Weller Pottery, Ohio, United States of America, 1905 A.D., private collection.



Rutile crystal in quartz matrix.

From my early observations, I realized that the development of ceramic color is

controlled by three variables: the materials that make up the glaze, the temperature to which it is fired and the atmospheric conditions in which it is fired and cooled. The same is true for any glaze at any temperature. Any glaze is basically silica that is melted by various fluxes and made to adhere to the clay surface by the addition of alumina, usually in the form of clay. From a color point of view, it is the flux or fluxes and firing and cooling conditions that exert the most important effects on colorants, and therefore color.

The colorants used in ceramics come from metals such as iron, cobalt, copper, manganese, chromium, nickel, titanium and a few others that generally play a lesser role. Depending on the variables of material makeup, firing temperatures and atmosphere, many individual colorants can produce a wide variety of color. Iron, for instance, can produce yellow, red, green, brown, gold, blue, gray, black, pink, orange or purple. Copper is capable of producing green, red, purple, turquoise, yellow, orange, blue, gray, pink and black. Of all the colorants used in ceramics, iron and copper are perhaps the most versatile in their potential, but all of the materials are affected by the three variables mentioned earlier and present an almost infinite range of possibilities. It is in understanding how these variables affect the color and how to go about developing specific colors that has been the core of my teaching, along with ceramic history.

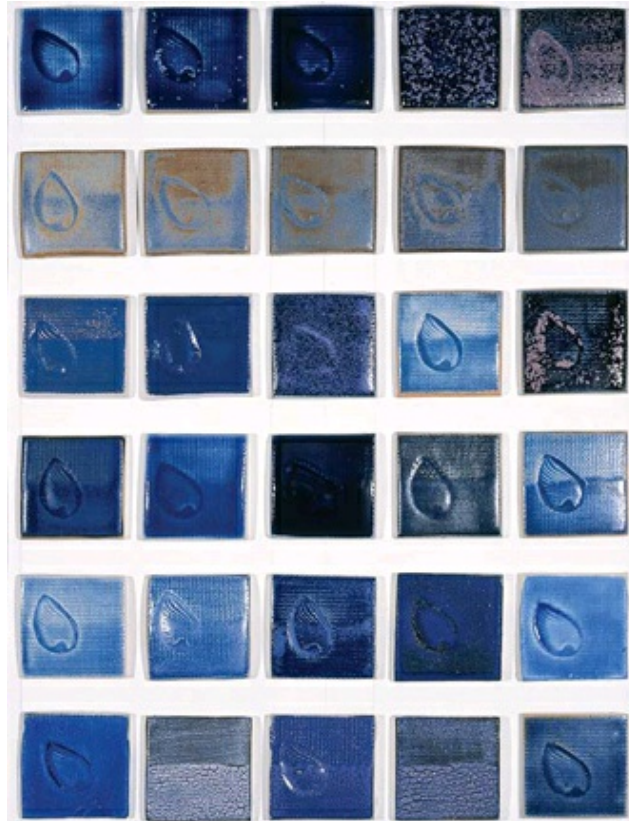
Rather than repeat what I have written in my previous books, I feel that a few images of glaze, color and surface will serve to excite the eyes and stimulate the minds of readers to explore this incredibly rich and satisfying part of the medium.



Samples of glazes colored with iron.



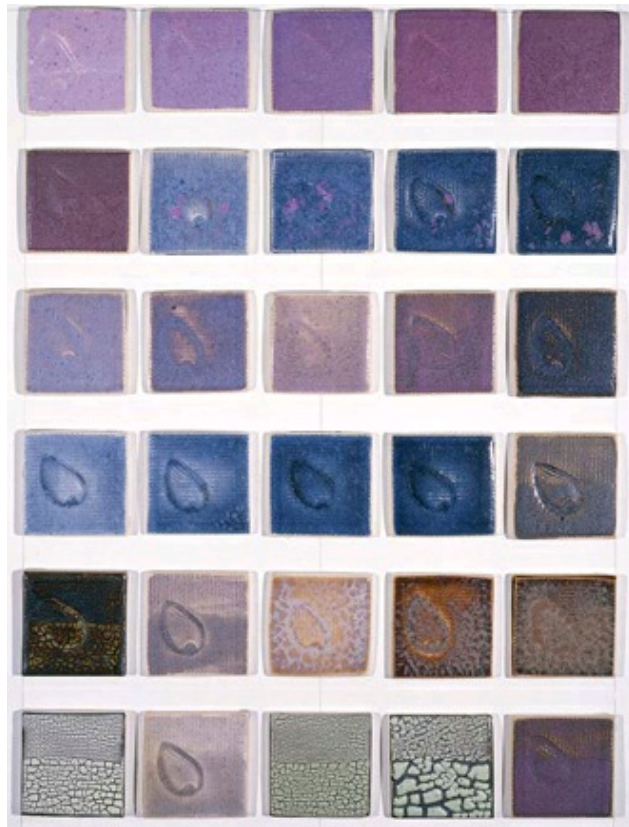
Samples of glazes colored with copper.



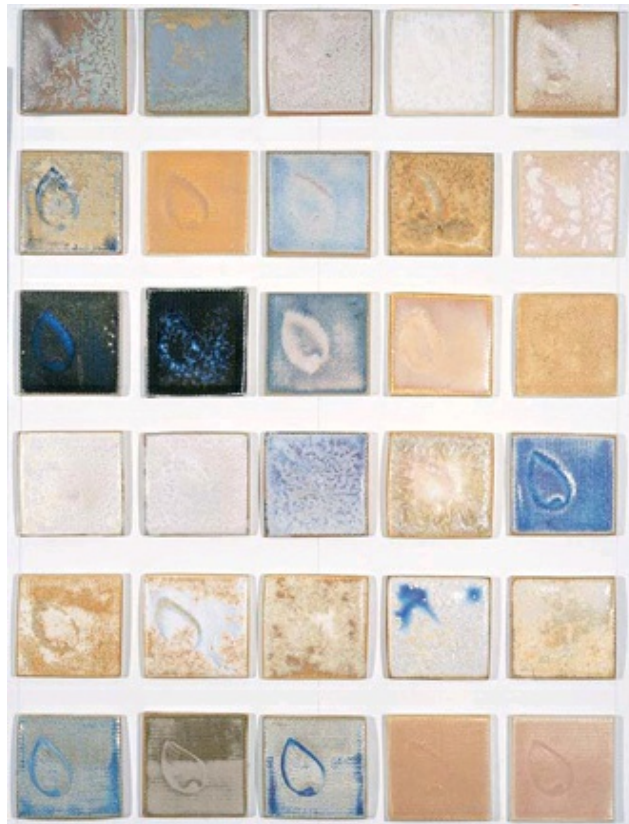
Samples of glazes colored with cobalt.



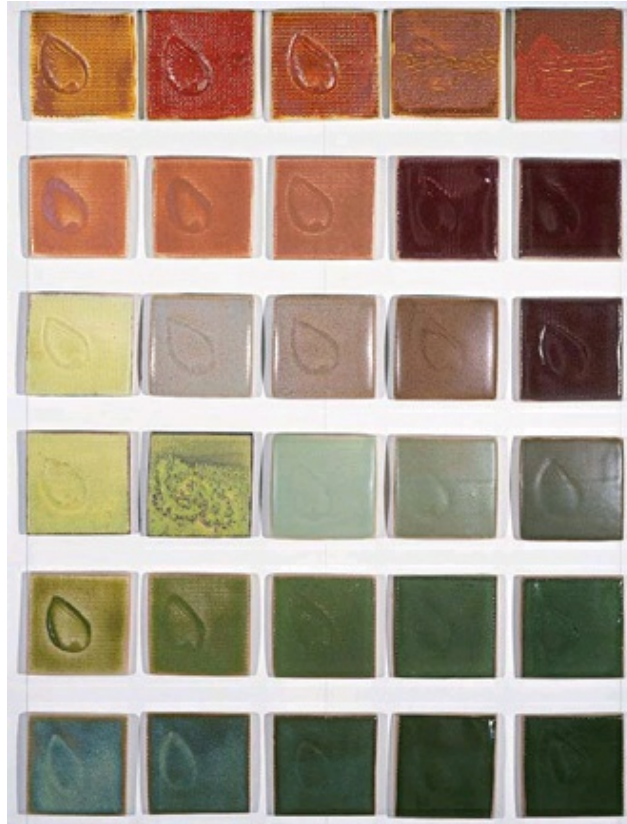
Samples of glazes colored with manganese.



Samples of glazes colored with nickel.



Samples of glazes colored with rutile.



Samples of glazes colored with chromium.

COLOR THEORY

Painters are blessed with many color theories developed by artists and scientists over almost 350 years, since Sir Isaac Newton's first color and light theories in late 17th century England. Perhaps the color theory most used today is that developed by Johannes Itten, Swiss designer and color master at the Bauhaus in Germany.

In my most recent book, "Making Marks," there is a chapter related to color theory with a condensed version of Itten's system. There is no need to repeat that chapter here, but a hint of color theory is useful, since the buyers of our work inevitably look at the color of what we do in relation to the environments that the art will become part of. Household living environments tend to be color coordinated according to standard color theories. We don't need to make pots with somebody's draperies in mind, but it is amazing how many people try to match them. I feel strongly that knowing color theory is a great help to bridging the gap between maker and buyer. The average human eye is capable of discerning 17,000 color variations. With experience, the ceramic artist can probably match almost all

of them.



The Johannes Itten color wheel.



The ceramic color wheel.

Being able to play with color at will gives the ceramic artist a tremendous advantage in the personal exploration and development of an individual expression in this medium. Color theory for ceramics hardly exists, since glaze development for most studio potters is primarily a hit-or-miss affair, but it doesn't have to be.

Through careful color mixing and cross-blending of colorants in glazes, the ceramic artist can make controlled glazes in almost any color, texture, tint or shade, as shown in the standard Itten color wheel and a ceramic glaze version of the outer ring.



Analogous colors in pigment.



Analogous colors in glaze.

Exact primary, secondary and tertiary colors may be a little difficult to control, owing to the need to fire in different ways for some colors, but it can be done by layered firings if desired. Color theory variations or hues, tints and shades may be achieved in ceramic glazes by the addition of white opacifiers — tin oxide is

usually best — and darkening agents, namely black stains, to the basic colored glaze.

Analogous colors in ceramic glazes usually may be achieved by progressive concentrations of color between 1 and 10 percent. For some colorants, concentrations up to 20 percent may be necessary. In learning what controls the development of ceramic color, one opens the door to a whole new world of exploration and possibilities. Most of us have probably seen artists' color charts in art supply stores. They show the range of colors produced by the various paint companies. What one sees in the tube is normally what one will see on paper. Painted on white paper, the colors will usually be quite true to the sample. Painted on darker papers, the colors will change tonally. Essentially, what you see is what you get. Although producers of stains in the ceramic medium also have color sample sheets, colors that are achieved in fired ceramics are greatly affected by the three variables of glaze makeup, firing temperature and atmospheric conditions inside the kiln, as well as occasionally outside the kiln during the cooling process. Unless one follows instructions given by the producers as to the glaze type plus firing temperature and atmosphere, one is quite likely to find changes in color and surface in the fired object.

In the ceramic surface, variations of surface and color go hand in hand. One can hardly change one without affecting the other. They are normally thoroughly integrated even in a white ceramic surface. I remember once seeing a piece by Hans Coper that had a predominantly dry-textured, white surface catching the rays of late afternoon sunlight. It appeared to glow from the inside with an intensity not normally visible.

COLOR TESTING:

MIXING AND BLENDING

There are many methods of color mixing to develop colored glazes or to observe the reactions of colorants with glazes. The simplest and most efficient that I have found for the purposes of quickly testing colorants in small batches of glaze is to use small test tiles. For testing a single glaze in this method, seven tiles are used per color progression. I always prefer to do color testing on white clays such as porcelain, as one gets a true idea of the color of the glaze. Tests done on darker-colored or stoneware clays will invariably be affected by the iron from the clay. It is like the difference between painting on white paper where the whiteness reflects through the color, or painting on a dark paper where the color is absorbed.

USING TEST TILES

- 1.** In a bowl, mix 100 g of base glaze with water to a normal brushing consistency or glaze thickness.
 - 2.** Weigh out 10 g of colorant (oxide, carbonate or stain). Place it on a clean, glossy surface (tile or paper). Use the side of a palette knife to flatten the color into a square or rectangular shape, Divide the material in half, then into quarters. Divide one quarter into two, and then one of these portions into two. All of divisions can be done visually. The final sectioned pile of color should look like what is shown.
 - 3.** Use test tiles of bisque-fired clay, with commonly used slips, if desired, to observe a wide range of effects. Serially number the for the glaze base, colorant(s) and concentration.
 - 4.** Brush the base glaze on the Tile 0, the control tile.
 - 5.** Add pile 1 of the colorant to the base glaze, mix thoroughly, and apply it to Tile 1.
 - 6.** Add pile 2 of the colorant to the mix, mix thoroughly, and apply it to Tile 2.
 - 7.** Add pile 3 to the mix, stir well, and apply it to Tile 3.
 - 8.** Add pile 4 to the mix, stir well, and apply it to Tile 4.
 - 9.** Add pile 5 to the mix, stir well, and apply it to Tile 5.
 - 10.** Add pile 6 to the mix, stir well, and apply it to Tile 6.
 - 11.** Fire to the required temperature, and record your results and observations.
- The approximate degree of saturation of colorant in the glaze will be:

Tile 0 = base glaze only.

Tile 1 = base glaze plus 0.625 percent color (pile 1).

Tile 2 = base glaze plus 1.25 percent color (pile 1 + 2).

Tile 3 = base glaze plus 2.5 percent color (pile 1 + 2 + 3).

Tile 4 = base glaze plus 5.0 percent color (pile 1 + 2 + 3 + 4).

Tile 5 = base glaze plus 7.5 percent color (pile 1 + 2 + 3 + 4 + 5).

Tile 6 = base glaze plus 10 percent color (pile 1 + 2 + 3 + 4 + 5 + 6).



Testing color progressions.

VARIED COLOR PROGRESSIONS

This group of five glazes are colored with six progressive additions of color to each base glaze. Although you may not want to achieve a variety of separately colored glazes, color progressions give a good view of how different colorants will behave in a glaze when applied in different intensities. For instance, if you were to brush a loaded brush of copper/water solution over a white glaze containing 30 percent barium carbonate and fired in oxidation, you could expect the range of color shown in the first line of tiles below. The fourth line down shows the range of possibilities of a mix of one part cobalt and four parts copper in a color/water solution, applied over a glaze opacified with 5 percent tin oxide. Having the tests done with colorants up to 10 percent gives a great record of potential color range. Exploring glazes in this way will develop a huge palette for the artist. Here, five different glazes with six different saturations of color each gives an idea of what is possible and how to get there.

Although not absolutely accurate, this test method provides a good guide to the probable final color, and it can be the basis for further experimentation of a more specific nature. For some colors, such as copper reds, 10 percent colorant will be too much to produce reds, and the saturation will turn to metallic black. However, there are often instances where unusual and interesting color variants develop only when there is a high saturation of color. For some other colorants, even 10 percent may not be enough to give the desired color strength, and up to 20 percent may be needed.

To get less or more colorant into the glaze, you can use the above system, but

instead of 10 g of color to 100 g of base glaze, use either 5 g or 20 g of color to 100 g of glaze. All of the glaze guidelines in my books are written in a parts-by-weight system. The materials are in ratio to each other, and it makes no difference how much glaze is being made. As long as the ratio is correct, the units of weight can be ounces, grams, pounds or tons.



Varied color progressions.



Cross-blen with 36 variations of rutile and copper added to barium base glaze and fired in oxidation at cone 8.

COLORANT CROSS-BLENDING FORMULAS

The mixture of various colorants can give a wide range of hues, similar to those found on charts in a paint store. The chart for Mixing Two Colorants shows one option. The total of the mix again adds up to 10; it should be mixed together dry before mixing into the liquid glaze base.

Dry-mixing small amounts of material can be done through a small kitchen strainer. When the dry colorants are thoroughly blended, proceed with the testing as outlined at the beginning of this chapter. If you are cross-blending colors in this way, using a ratio of either 2 percent or 4 percent of colorant X, and 8 percent or 6 percent of colorant Y, to total 10 percent, the following diagrams show approximately how much of each colorant will be in the various cut sections of the color pie. For the ratios 6:4 and 8:2, just use the same process, but exchange X and Y materials.

MIXING TWO COLORANTS

Cross-Blend Number	Tile 1	Tile 2	Tile 3	Tile 4	Tile 5	Tile 6
Colorant X	10	8	6	4	2	0
Colorant Y	0	2	4	6	8	10
TOTAL	10	10	10	10	10	10

COLORANT CROSS-BLENDING RATIOS 2:8 AND 8:2*

Colorant or Opacifier	Tile 1	Tile 2	Tile 3	Tile 4	Tile 5	Tile 6
Ratio	0.625%	1.25%	2.5%	5%	7.5%	10%
Colorant X2	0.125	0.25	0.5	1.0	1.5	2.0
Colorant Y8	0.5	1.0	2.0	4.0	6.0	8.0

* Total amount of colorant in glaze

COLORANT CROSS-BLENDING RATIOS — 4:6 AND 6:4*

Colorant or Opacifier	Tile 1	Tile 2	Tile 3	Tile 4	Tile 5	Tile 6
Ratio	0.625%	1.25%	2.5%	5%	7.5%	10%
Colorant X4	.025	0.5	1.0	2.0	3.0	4.0
Colorant Y6	0.375	.075	1.5	3.0	4.5	6.0

* Total amount of colorant in glaze

For lighter or darker colors, the colorant volume may be halved or doubled. To develop pastel colors, colorants and opacifiers may be mixed in the same way.

Cross-blending two colorants (or colorant and opacifier), if done with the above mixtures, will give 36 color variations from two materials. There will be six variations of Material X, six of Material Y, and 24 of the two together. Working in this way, you can achieve very subtle gradations, and it becomes much easier to select exactly what you want. The number of color variations that may be achieved

from just one glaze is infinite.



PART IV
DEVELOPMENT OF IDEAS:
FROM CONCEPT TO REALITY



“All art is autobiographical; the pearl is the oyster’s autobiography.”
-Federico Fellini, *Atlantic* (December 1965)

CHAPTER 11

THE LINE OF ATTACK



The images in this chapter show some of the sources of ideas that have directly contributed to my work in some way. Sometimes the genesis is obvious, sometimes not. Some are object based and some are process based. The images in the Chapter 12 show the results of these ideas.

I refer to the 32 words on page 195 as the “Ions of Creativity.” I’m sure there could be many more. They continue to jump-start my mind and lead me into the development of new ideas, or the redevelopment of old ones. At times when the brain seems constipated, one or other of these words can usually be counted on as a purgative to stimulate a flow of thought.

For me, the line of attack is the constant need to explore my inner resources and produce new work that might be based on any number of variables. When I was much younger and beginning to find out who I might be as a ceramic artist, it used to worry me greatly that I had such diverse interests that were always in a state of flux. What I had been told was that “Real Artists” developed a recognizable style and stayed there. My work reflects my mind, cluttered and yet always searching for new essences! As a result, my clay work is usually a combination of several general areas that often cross over each other: ceramic process; ceramic technology; ceramic history; landscape; seascape; cloudscape and garden, flower and fruit forms; architecture; bird and animal images; theatrical and historical costume; and memory traces that might incorporate just about anything.

THE IONS OF CREATIVITY

OBSERVATION
INSPIRATION
EXPLORATION
ACTION
MEMORIZATION
INNOVATION
ALTERATION
FASCINATION
IMAGINATION
CELEBRATION
CONCENTRATION
EDUCATION
VISUALIZATION
COMPOSITION
PENETRATION
DETERMINATION
PERSPIRATION
MOTIVATION
ADMIRATION
IMPRESSION
EXPRESSION
REACTION
DESPERATION

RENOVATION
PASSION
DEDICATION
OBSESSION
EXAMINATION
REGURGITATION
REFLECTION
COMBINATION
GESTATION

LINE OF ATTACK

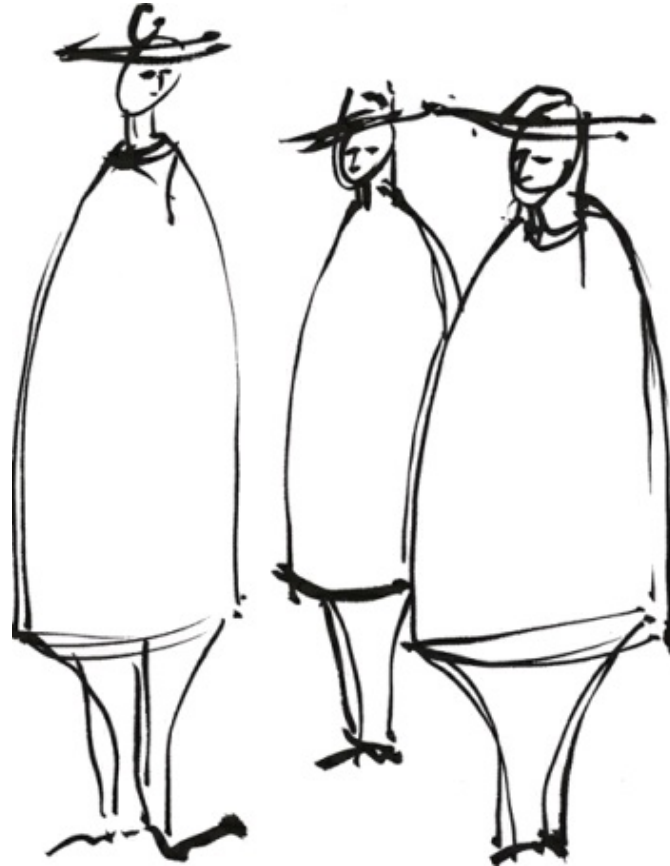
I normally use the line of attack in the development of new, one-of-a-kind work. I'm both blessed and cursed with having a mercurial mind that never seems to stop. I always keep a sketchbook close to the bed for ideas that occur in the middle of the night, when my mind is often at its most active. I'm always looking for new directions to follow. My sketchbook is a continual "aide memoire" that will continue to provide ideas. It is at least two years ahead of where I am at any given time. However, it continually needs recharging, so it is always with me to capture images, ideas and color concepts. I don't attempt to do "finished" drawings. If I can capture the essence of whatever intrigues me in a line, that's all that is needed. Too much information sometimes gets in the way of creative interpretation.

Developing truly original forms is a great challenge. One such form is shown in the making stages as dividers of the four parts of this book and the image on the front cover. It is a form that I use in many ways.

It started off as a simple line drawing of figures surrounding a Mexican grave site, wearing large sombreros and serapes, ponchos or cloaks. The rapid sketchbook drawing of these figures remained in the book until I was looking for ideas one day and flicked through and found this drawing.

Suddenly it presented itself to my imagination as a ceramic form that could be made in two parts, one being right-way-up and flattened, and the other being made upside-down. Both parts were thrown and opened right down to the wheel head or

batt surface. The two parts are joined at what were formerly the bases, which now are approximately one-third of the way up the form. The lower third is made thickly, so that the weight is primarily down low to avoid instability. I call it a Footed Parabolic Bottle. It has an implied figurative structure of the cloaked figure. The parabolic bottle also breaks down into Golden Mean or Fibonacci proportions (see Chapter 8) with the top part being approximately two-thirds and the lower part approximately one-third of the bottle's total height.



Grave site figures, Mexico.

It isn't the first time that I have used an implied figurative content; in fact, it is something that I have often used. The rectangular landscape bottles in the next chapter were developed from theatrical costume design of cloaked figures made considerably earlier. Several of the forms that I have often used are based on a number of geometric shapes and geometric solids. A concentration of circles, semicircles, rectangles, squares, ovals, polygons and parabolic arches have been part of my form vocabulary since I started making one-of-a-kind work. The surfaces of my work usually have so much going on that they need visually simple forms to balance them. Although visually simple, the forms are often complex in the

making, being constructed from either wheel-thrown or slab-built sections.



“Footed Parabolic Bottle,” 1985, porcelain, mocha diffusions, oxidized firing at cone 8. Size: 16" tall.



“Footed Parabolic Bottle — Clematis Series,” 2002, porcelain with multiple glaze application, brush and trailer work, gas reduction fired at cone 10.



“Footed Parabolic Bottle,” 1989, porcelain with celadon glaze, brushed copper glaze, copper and manganese brush work, white glaze trail, reduction fired at cone 10.



“Footed Parabolic Bottle — B'Oribe Series,” 1987, reduction fired at cone 10.

CHANGING DIRECTIONS

While I embrace changing directions in my work style, it can sometimes be a problem if one is dealing with galleries. Many years ago, when I was doing most of my landscape work and the commercial galleries I worked with couldn't get enough of it, I became known as a “blue-chip artist.” This means that one has evolved a strong, well-recognized personal style that is “bankable” for the gallery owner.

After several years of being engrossed in landscape imagery, I felt that I had taken it as far as I could, and I looked for new directions that would excite both myself and purchasers of my work. When I wanted to follow different directions in my new work, many of my galleries didn't want me to change, as I might no longer be “bankable.” I felt that this was an unwarranted infringement on my creativity as an artist; I know of a number of artists who also have had this happen. So, I ceased my associations with the offending galleries and decided to only sell through my own gallery, or public galleries that are more open-minded and don't try to control an artist's output.

I was doing some ceramic research in Greece when the new directions came about in an unexpected way. I became mesmerized by a completely different landscape and its colors, and this made an indelible mark. Through museums in Athens, Heraklion on the island of Crete, and Akrotiri on the Aegean island of Santorini, I refreshed my love of archaic pottery from several Mediterranean cultures. I created a lot of drawings and color notes of both landscape and ceramics. I was armed with a great number of ideas to follow.



Ios, Island of Santorini.

Some months later, I had an exhibition of my work in a large public gallery in Vancouver, Canada, where I explored influences from my visit to Greece. I titled the exhibit “Explorations Within a Classical Theme.” I had no idea how the reaction to this abrupt change in my work would be accepted. In public galleries, the work is not usually for sale, so there were no telltale little red dots denoting sales; I couldn’t gauge people’s responses. The exhibition then transferred to a commercial gallery in Montreal, where it sold out on the opening night! This was an important lesson for me in self-preservation. Having jumped that particular hurdle, I now felt comfortable following any new direction that seemed to present itself.

The development of ideas is what art making is all about, regardless of the medium chosen for the expression. Chapter 7 extensively explored the basic practical concepts of the functional object and its role in daily life. Chapters 8, 9 and 10 dealt with form, surface and color, the three critical aspects of any object, particularly those where function is not a primary concern. In conjunction with idea or concept, form, surface and color are the foundations of contemporary ceramic

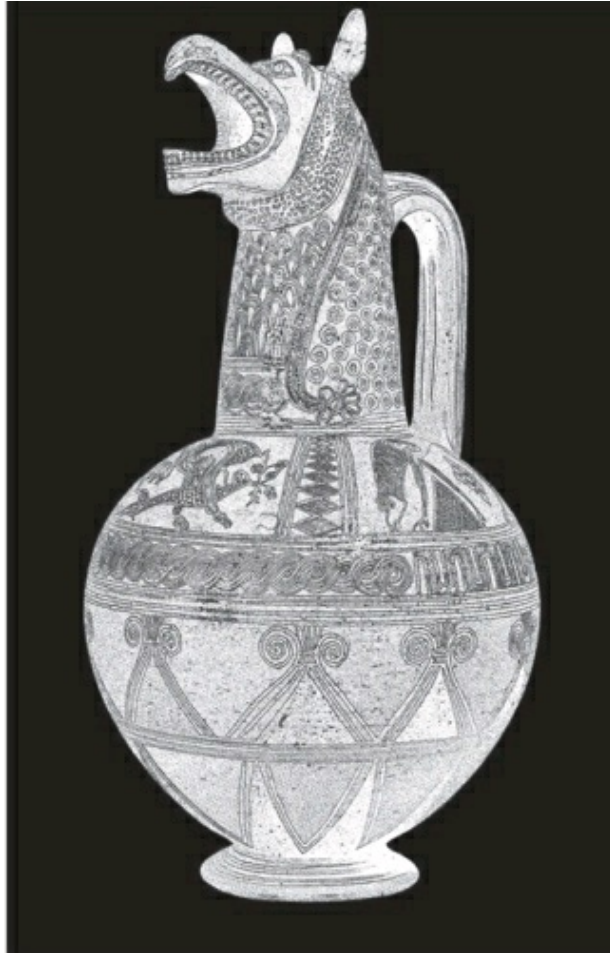
art.

In a genre as diverse as ceramics, the ideas spread across a field that ranges from down-to-earth functional pottery that needs to work, to the limitless extravagances possible if there are no parameters of use required. On the one hand, there are considerable artistic compromises that may need to be addressed if the object is required to fulfill a purpose. On the other, total freedom of expression is the name of the game. Initially, there was little consideration of the individuality that comes through the choice of decorative processes and firing methods. Developing the artistry behind the functional object is every bit as complex as other artwork, with the added problem of compromise in order to effect usability.

In the one-of-a-kind or one-of-a-family work that I make, I usually work in series. Following the model of the printmaker, I explore a certain range of variables of form, surface, color and decoration processes until I have learned what I wanted to learn from it. I then move on to the next series. There is no plan in respect to the length of a series; occasionally they may extend into the high hundreds, but usually, they go into the 100 or less category. Sometimes, a series might be revisited years later in light of new ideas or the discovery of new surfaces or new combinations of surface and color. As will be seen with the selections in Chapter 12, most series utilize a variety of forms to explore the potential of any particular concept.

I find the development of new, original forms to be the most difficult part of the process, and I often continue to explore geometric variations and visually simplified forms that don't fight with the surfaces or decorative processes that I might use. Since entirely new forms tend to be a rarity, I often use similar forms for a variety of surface approaches when I feel that the form and decorative process make a suitable match.

The conception and gestation of ideas is a continual process that only rarely occurs in leaps and bounds. More likely, perhaps, is the slow, methodical or analytical approach that I find gives me the most satisfactory results, keeping both mind and eyes open for that flash of inspiration whenever it presents itself. With apologies to Thomas Edison, "Art, like genius, is 1 percent inspiration and 99 percent perspiration!" Nevertheless, it's an exciting and challenging road to travel.



"Cycladic Greek Jug," Oinochoe, 675 B.C.



Decorating on glaze with glaze and pigment.



Adding details by glaze trailing.



Raccoon skull.



Rufous hummingbird. Photo by Tony Markle.



Douglas Cardinal, Canadian Museum of Civilization, Ottawa, Canada. Photo by Peter Jones.



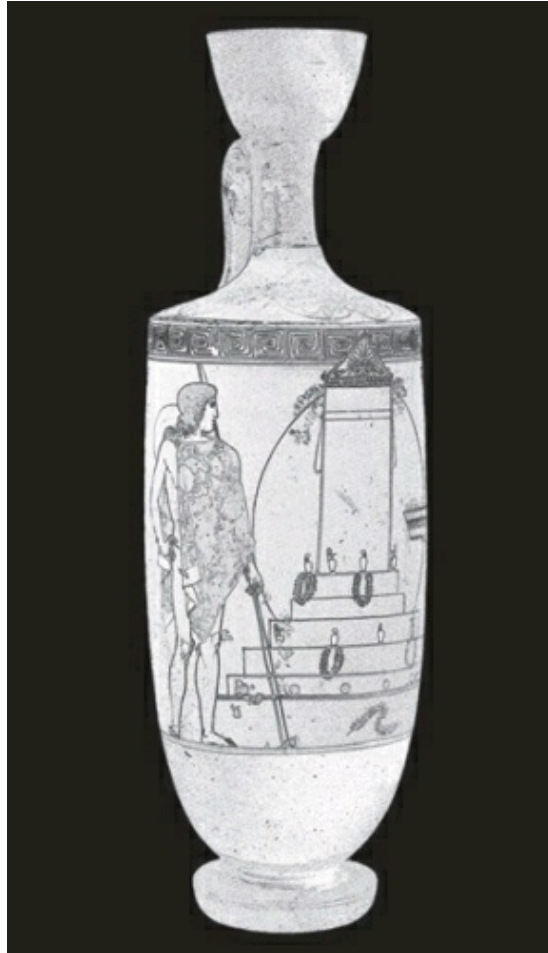
“Fish Plate,” starting slip trailing.



Dead trees. Photo by Robin Hopper.



"Fish Plate," finishing slip trailing.



“Lekythos,” Greek, 500-550 B.C.



“Bird,” starting slip trailing.



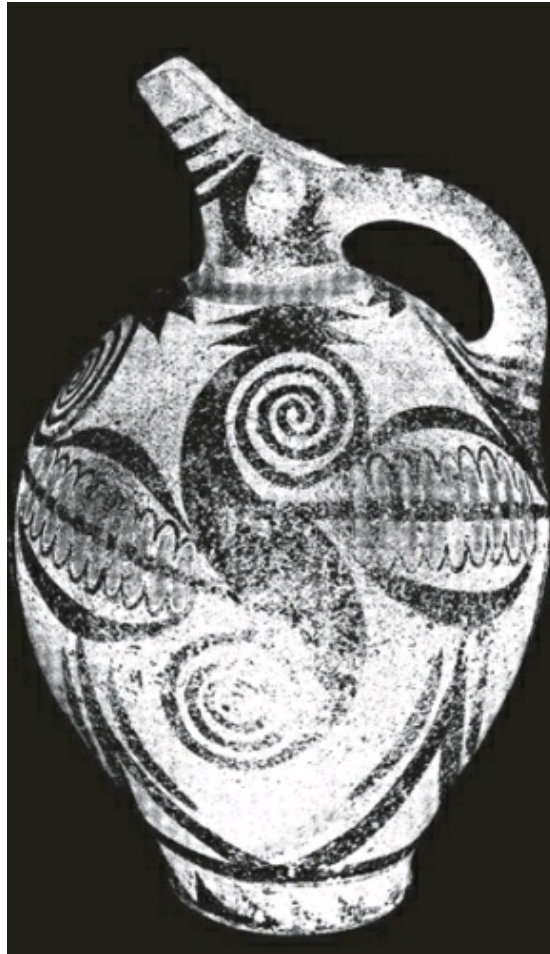
St. Basil's Cathedral, Moscow. Photo by Francis Pettit.



"Rhinoceros," Chinese bronze vessel, 1500 B.C.



“Bird,” finishing slip trailing.



“Beaked Jug,” Kamares ware, Crete, 18th century B.C.



Clematis Nelly Moser. Photo by Robin Hopper.



“Camel,” Tang Dynasty, China.



Le Corbusier, The Chapel at Ronchamp. Photo by Franc D'Ambrosio, courtesy of D'Ambrosio Architecture and Urbanism.



Nautilus shell.



Cloudscape, Vancouver Island. Photo by Gary Woodburn.



Fluting a feather basket bowl.



Plum blossom.



Faceting an agateware bowl.



“Oribe Basket,” 18th century, Japan.



Buckminster Fuller Geodesic Dome, Montreal, 1967. Photo by Robin Hopper.



Rodent skull.



Slipware plate, starting decoration.



Cat skull.



"Oribe Ewer," 17th century, Japan.



Slipware plate, finishing decoration.



“Beaked Jug,” Kamares ware, Crete, 18th century B.C.



Ripples and Reflections, Witty's Lagoon, Metchosin, British Columbia, Canada. Photo by Robin Hopper.



“Water Dropper,” Korean, 13th century.



Raymond Moriyama, National Gallery at Saudi Arabia. Courtesy of Raymond Moriyama Architects.

CHAPTER 12

WORK SERIES – THEMES AND VARIATIONS



I have always thought of the development of my one-of-a-kind work as being a suite of explorations or personal investigations, delving into one series of ideas in depth until I feel I have exhausted its potential or it has exhausted my imagination. Often, the explorations are revived at a later date as a result of differing experiences or seeing older work in a different light. This reassessment method is in a continual state of flux until I feel that I have nothing further to say in this series.

Sometimes the explorations are process based, where a decorative process or ceramic technology suggests many variants that might be followed. Sometimes they are color based, gaining momentum from visual stimuli such as landscape, seascape or plant coloration. At other times, they may be suggested by historical or ethnic objects that might have been made in a variety of media, including bronze, ceramic, iron, glass, wood, basketry and stone.

Yet other searches are form based, where the development of form is integrated with surface and color. Sometimes ideas cut across several variants. This chapter examines the genesis and development of a number of different paths explored over many years. All the works shown are in porcelain except where otherwise noted.



“Core Samples Series,” 1986, three-colored agateware, electric fired at cone 8. Sizes: 6" tall and 10" tall.

COLORED CLAYS

Colored clay work traditionally utilizes naturally occurring earthenware clays, colored by their contamination with iron, manganese, rutile and calcium over eons of time. The first major examples of colored clay combinations are seen in China in the Tang Dynasty (618 A.D. – 902 A.D.). My early fascination with geology introduced me to the concept of folding and cutting across surfaces. Strata of sedimentary rock, such as limestone, quickly show the faulting or uplifting movements from earthquakes that bent or rippled the layers of still-soft minerals. Cutting across soft to leather-hard laminated clays exposes a microcosm of the natural world. Differing methods of cutting — from knife cut, wire cut, fluted and chatter trimmed — give a wide range of variations. When fired, they can have the look of the semiprecious agate stone.

I use porcelain as my base clay for these pieces. The colored porcelain clays have varying percentages of colorant added to the basic clay to achieve a wide range of results. I mix my own clay bodies from powdered materials, so it is easy to add colorant in powder form. I make the clay into a liquid slip for thorough dispersal of color, then dry it to working consistency for wheel or hand building.

One can use mineral oxides, carbonates or commercially prepared stains for variety. I prefer carbonates, since they usually mix more thoroughly. Since some colorants are also fluxes (which make the clay soften and mature at a slightly lower temperature in firing) and others are refractories (which make the clay fire higher), there will undoubtedly be some technical research needed to balance this out. Technical information on colorants and colored clays can be found in my books “The Ceramic Spectrum” and “Making Marks.”



“Vase,” 1977, faceted three-colored agateware fired in a salt firing. Size: 10" tall.



“Vase,” 2006, two-colored agate porcelain with tobigana, kasuri-mon or chatter trimming. Gas fired in reduction at cone 10. Size: 15" tall.



“Vase,” 1977, faceted three-colored agateware fired in a wood-firing kiln. Size: 9" tall. 209

Colored clays can be fired in a variety of ways to effect many differing qualities. The illustrations show agateware that has been fired in electric, gas, wood and salt firings. I usually only glaze the interiors, which allows the full pattern to be easily visible. It also may be glazed externally, depending on potential uses and individual preferences.



“Lidded Jars,” 2005, three-colored agateware, electric fired at cone 8. Forms based on Byzantine architecture.
 Sizes: 6" tall and 9" tall.



“Lidded Jar,” 1978, three-colored agateware, gas fired in reduction. Form based on Byzantine architecture. Size:
 6" tall x 7" diameter.



“Landscape Bowl,” 1975, multicolored porcelain, neriage, gas fired in reduction at cone 9. Size: 5" tall x 9" diameter.



“Clam Bowl,” 1981, three-colored agateware, gas-fired at cone 9 in reduction, deep fluting. Inspired by snorkeling in Australia and looking at giant clam forms and surfaces. Size: 6" tall x 8" diameter.



"Shell Form," 1974, three-colored agate porcelain, electric fired at cone 9. Size: 9" tall.



"Feather Basket Bowl," 1982, three-colored agateware, electric fired at cone 8. Size: 10" diameter.

MOCHA DIFFUSIONS

The Mocha Diffusions Series shows another specialized earthenware process from the slipware range; it originated in the southwest of England during the late 18th century. It is traditionally covered with clear and sometimes colored glazes.

I prefer to use it with unglazed porcelain clays and colored slips fired to cone 10, rather than earthenware. This gives greater emphasis to the delicate nature of the dendrite patterns that emerge as part of the process. I fire mocha diffusions in electric-, gas- and wood-firing kilns for differing effects. “Making Marks” has a thorough explanation of this process. It emulates the natural formations of pattern found in moss agate gemstones and dendritic limestone.

Sometimes the patterns that are formed are reminiscent of full landscapes, cloud formations, trees and bushes. I’m often surprised at what people read into the images — certainly not something that I had consciously put there!



“Disc Vase,” 1978, porcelain with mocha diffusions, gas fired at cone 9. Size: 16" tall x 10" wide.



“Footed Parabolic Bottles,” porcelain with mocha diffusions, gas fired at cone 9. Sizes: 15" tall and 17" tall.



“Slab and Thrown Bottle,” 1972, black porcelain with mocha diffusions, gas fired at cone 9 in reduction, overglaze of enamel fired at cone 018. Size: 14" tall x 10" wide x 3" deep.



“Footed Vase,” 1978, black porcelain with mocha diffusions, gas fired at cone 9. Size: 7" tall x 5" wide x 3" deep.



“Slab Bottle,” 1972, porcelain with mocha diffusions, gas fired at cone 9. Size: 15" tall x 10" wide x 3" deep.



“Disc Vase,” 1978, black porcelain with mocha diffusions and overglaze enamel. Size: 14" tall x 10" wide.

LANDSCAPE AND SEASCAPE SERIES

Varied landscapes that I have seen in my travels continue to be a major source of visual stimulus. My own local landscape and the changing quality of light due to the refraction of the sun's rays through droplets of water have given me much to think about.

Making annotated sketchbook drawings has been a favorite reference source for decades. As a direct result of teaching glaze and color development for nearly 40 years, I amassed a knowledge base that lets me look at just about any color, and, through a process of elimination, come up with a glaze and coloration to match that of the subject. Continual observation, study and technical research build on that base. See Chapter 18 of "The Ceramic Spectrum" for information about most of the colors one might be looking for and how to achieve them. Since it is selectively memorized information, it is not always foolproof, but it works for me about 95 percent of the time. It allows me to use the ceramic surface like a painter or printmaker, layering glazes and sometimes slips to develop landscape imagery.



"Night Forest Series, Landscape Plate," 1978, multiple glaze application, gas fired in reduction. Size: 15" diameter.

There may be up to 10 thinly applied glazes used to develop the required

surface. They are usually all fired in one glaze firing, most of the time at cone 10 reduction. The glaze application is done with combinations of pouring, dipping, glaze intaglio, wax resist, glaze trailing, lamb's wool rollers and brushwork. Sometimes, I sprinkle dry materials, such as powdered wood ash, granular rutile and granular ilmenite, onto the wet glaze. I occasionally use a small sponge roller that features a pattern or texture that was burned into its surface with a small soldering iron. The roller is then dipped in colorant or glaze and rolled onto the ceramic surface. In conjunction with interesting glazes, these can provide an amazing range of subtle effects.



“Two Landscape Bottle Forms,” 1976, two part thrown and constructed oval bottles, multiple glaze applications with fumed gold luster on larger bottle. Taller bottle size: 18" tall.



“Night Forest Series, Parabolic Bottle,” 1978, multiple glazes, gas fired in reduction at cone 9. Size: 16" tall.



“Kamloops Series, Parabolic Bottle,” 1978, multiple glazes, gas fired at cone 9. Size: 15" tall.



"Seascape Plate," 1980, multiple glazes, gas fired in reduction at cone 9. Size: 14" diameter.



“Ontario Winter, Landscape Bottle,” 1976, multiple glaze application, gas fired in reduction at cone 9, sponge stamping. Size: 20" tall x 10" wide.



“Metchosin Mists, Landscape Bottle,” 1978, multiple glazes, fired in reduction at cone 9. Size: 22" tall x 10" wide.



“Cloudy Landscape Plate,” 1978, multiple glaze application, glaze intaglio, gas fired at cone 9 in reduction. Size: 20" diameter.



“Mont St. Hilaire, Tile Panel,” detail, earthenware with colored terra sigillatas and low-fire glazes, fired in oxidation at cone 06. Size: 48" tall x 24" wide.



“Mont St. Hillaire, Tile Panel,” detail, earthenware with colored terra sigillatas and low-fire glazes, fired in oxidation at cone 06. Size: 48" tall x 24" wide. 217

SCULPTURAL SERIES

The use of the potter’s wheel to create parts for sculptural assemblage has been part of ceramic history for millennia.

The first zoomorphic and anthropomorphic pieces that I saw in museums were 3,000-year-old wares made by the Amlash from ancient Persia, early Hittite wares from Israel, Anatolian wares from what is now called Turkey, medieval pottery from England, archaic Greek wares from the island of Crete and early Chinese and Korean wares. Most of the time, the pieces were of a functional format, such as vessels for wine or other libations.

My interest in this area of work started when I was an art student, and it gave me an opportunity to combine interests in natural history and ceramic history. Bird, animal and human forms were all part of my student output. I don’t intend to make “serious” sculpture. I have gone back to this area of work sporadically throughout

my career for my own fun and enjoyment. The sculptures are formed from wheel-thrown pieces, in much the same way as one composes a teapot from separate thrown parts. The “Fish Tiles” were started as part of my tongue-in-cheek “Anglojapanadian” garden concepts when I felt that “Dry Streams” could equally be stocked with “Dry Koi Fish” in the multicolored hues of Koi.



“Tang Camel,” 2004, wheel-thrown sculpture, fired to cone 6 and painted with acrylics. Size: 18" tall.



“Bird Bowl,” 1990, wheel-thrown sculptural form, colored wood ash glaze with pigment brushwork. Size: 10"

diameter.



“Rhino,” 2006, wheel-thrown sculpture, gas fired at cone 9 in reduction. Size: 8" tall x 10" diameter.



“Japanese Helmet,” 2002, mixed media, wheel-thrown sculpture, gas fired at cone 9 in reduction. Size: 24" tall.



“Waterbirds,” 2005, wheel-thrown sculpture, gas fired in reduction at cone 9. Size: 9" tall x 6" wide.



“Fish Tiles, Bekko and Kohaku,” 2003, slab-built porcelain tiles, gas fired in reduction at cone 9, orange glaze re-fired at cone 06. Size: 11" long.

ORIENTAL SERIES-

TENMOKU, SHINO AND B'ORIBE

Learning my medium in England in the 1950s and 1960s, when the prevailing aesthetic followed Bernard Leach's AngloAsian lines, the glazes most often visible were tenmoku, celadon and high-alumina matte. Almost all English functional potters were using variations of these glazes for their production, myself included.

Tenmoku and celadon are traditional Chinese glaze types that have had variations in use for nearly 2,000 years. Highalumina matte is a glaze that was developed in North America that sometimes behaves like a matte shino glaze that had its beginnings in Japan in the late 16th century.

Through teaching ceramic history and glaze development — I'm loath to call it chemistry, as it is more akin to alchemy — I have researched and worked with most oriental glaze types in many different ways. These include variations of tenmoku, celadon, chün or jün and various types of copper red, such as flambé, oxblood and peach bloom from China. From Japan, I have been particularly drawn to the Shino and Oribe styles of work that use playful brush decoration and overlapping glazes, for their unique qualities in work was made for the Japanese tea ceremony, chano-yu.

Much as I love the simple, understated beauty of undecorated oriental glazes in other people's work, as a mad brushwielder, I prefer to explore the possibilities of pigment and glaze painting over the basic glaze coat or use some other decorative treatment under the glaze. In these series, I am not trying to emulate the object per se, but I am trying to find the essence of the Oriental form, glaze and decoration that coincides with my own aesthetic sensitivities. Since I have borrowed the concept of random pattern and brushwork from the Oribe wares, I refer to this series as B'Oribe. I'm not trying to make Japanese-style pots, but I try to improvise on original themes to achieve new variations, much as jazz musicians improvise on a basic theme.



“Lidded Jar,” 2005, tenmoku with brushwork, glaze trailing, gas fired in reduction at cone 9. Size: 10" tall x 8" diameter.



“Deep Bowl,” 2005, Shino glaze with iron brushwork, reduction fired at cone 9. Size: 5" tall x 4" wide.



“Deep Bowl, B’Oribe Series,” 2005, thrown and altered, multiple glaze and glaze trailing, fired in reduction at cone 9. Size: 5" tall x 4" wide.



“Deep Bowl, B’Oribe Series,” 2005, glazes, wax resist and iron brushwork, reduction fired at cone 9. Size: 5" tall x 4" wide.



“Squared Lidded Jar, B’Oribe Series,” black gloss and dry white glazes, black pigment brushwork and glaze trailing, reduction fired at cone 10. Size: 7" tall x 5" wide.



“Lidded Jar,” 2003, dry Shino glaze with iron brushwork, gas fired in reduction at cone 9. Size: 8" tall x 6" diameter.



“Fan Plate – B’Oribe Series,” sponge stamping over dry white glaze, glaze trailing, gas fired in reduction at cone 9. Size: 16" diameter.



“Large Plate, B’Oribe Series,” 2004, multiple glaze with iron brushwork, and glaze trailing, gas fired at cone 10. Size: 21" diameter x 3" high.



“Large Plate with Fish,” 2005, tenmoku with trailed slip and glaze trailing, reduction fired at cone 9. Size: 18" diameter.



“Squared Plate,” 2005, tenmoku with rutile glaze brushed on, iron brushwork and glaze trailing, gas fired in reduction at cone 9. Size: 10" square.



“Deep Bowl,” 2005, thrown and altered, tenmoku with rutile glaze brushed on, iron decoration and trailed glazes, gas fired in reduction at cone 9. Size: 5" tall x 4" diameter.



“Lidded Jar,” 2005, dry shino glaze with iron brushwork, reduction fired at cone 9. Size: 10" tall x 8" diameter.



“Handled Basket, B’Oribe Series,” 1996, fired in reduction at cone 9, trailed red over glaze fired in reduction at cone 06. Size: 8" tall x 7" wide.



“Oval Bowl, B’Oribe Series,” 1987, black gloss and dry white glazes, black pigment sponge stamping and glaze trailing, fired in reduction at cone 9. Size: 7" tall x 10" wide. 223

GARDEN SERIES

The Garden Series and the Landscape Series mentioned earlier form the most painterly groupings of my work. My Anglojapanadian garden is a microcosm of the larger landscape and draws heavily on Japanese garden styles.

I became particularly interested in Japanese gardens when teaching the history of ceramics. There is an intimate relationship between the pottery made for the tea ceremony, the teahouse itself and the Japanese garden that forms the environment in which the meditative ceremony takes place. The physical space of the garden, as well as many details found within it, form the content of this series of work. One of the subgroups, the Clematis Series, developed from looking at the form and colors of a particular plant, Clematis Nelly Moser, a profuse climber that grows beside our gallery door. The flower is about 5" to 6" in diameter with creamy white petals and a bar of gray and carmine down the center of each petal. There are great subtleties of coloration that come from a very thin coppercolored glaze over a white, microcrystalline, high-alumina matte glaze in conjunction with black pigment brushwork and trailed details with a tin-opacified glaze. A similar Hibiscus Series uses darker pinkish-gray and red floral images by using broad glaze brushwork in a white, tin-opacified glaze that sucks the copper from a copper-colored base glaze to develop localized copper red or flambé details.



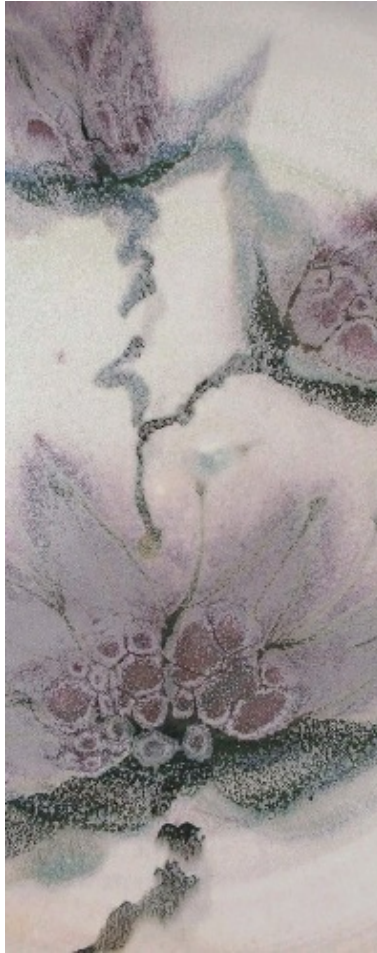
“Tall Lidded Jar, Clematis Series,” 2005, multiple glaze application with pigment brushwork and glaze trailing, reduction fired at cone 9. Size: 25" tall x 10" diameter.



“Deep Square Bowl — Clematis Series,” 2005, multiple glaze application, pigment brushwork and glaze trailing, reduction fired at cone 9. Size: 5" tall x 6" square.



“Oval Vase, Clematis Series,” 2003, thrown and altered, multiple glaze application with pigment brushwork and glaze trailing, reduction fired at cone 9. Size: 12" tall x 6" wide x 4" deep.



“Plate, Clematis Series,” detail, 2004, thrown and altered, multiple glaze application with pigment brushwork and glaze trailing, reduction fired at cone 9. Size: 2" tall x 16" diameter.



“Zen Garden Tray,” 1999, thrown and constructed, ash glaze, fired in reduction at cone 10. Size: 5" tall x 15"

diameter.



“Large Plate, Green Fish Series,” 2005, green glaze with trailed slip reduction fired at cone 9. Size: 3" tall x 20" diameter.



“Plate, Hummingbird Series,” 1987, glazes, sandblasted image and bone fuming, reduction fired at cone 9. Size: 2" tall x 14" diameter.



“Large Plate, Heron Series,” 1987, glazes, sand blasted image, brushwork and bone fuming, reduction fired at cone 9. Size: 3" tall x 23" diameter.



“Plate, Hummingbird Series,” 1987, glazes, sandblasted image, pigment brushwork, bone fuming, reduction fired at cone 9. Size: 2" tall x 12" diameter.



“Deep Bowl — Plum Blossom Series,” 1978, multiple glaze application, pigment brushwork and glaze trailing, reduction fired at cone 10. Size: 6" tall x 5" diameter.



“Vase — Green Garden Series,” 2005, multiple glaze application, pigment brushwork and glaze trailing, reduction fired at cone 10. Size: 13" tall x 6" diameter.

CLASSICAL SERIES

This series draws on forms found in cultures surrounding the Mediterranean Sea and modified to a contemporary idiom. Influences from pottery and sculptural styles from Greek, Roman, Minoan, Mycenaean, Hittite, Persian, Arabian, Egyptian and North African sources provide the form. Occasional references to Asian bronzes also are included.

The surfaces were developed to have the look and feel of various materials, including ceramics, patinated metals and stone. The colors were drawn from the colors of the area: white buildings, the pale to deep turquoise of the sea, the creamy yellow ochre sand, and the burgundy, black and gold of the precipitous volcanic cliffs of the Island of Santorini.



“Kama Form Lidded Jar — Tea Garden Series,” 1999, trailed slip under alkaline slip glaze, fired in oxidation at cone 8. Size: 8" tall x 9" diameter.

Most of the glazes developed for this series were once fired in oxidation at about cone 8 to 9. Some were fired in gas kilns and received a very light reduction at the end of the firing to create dusky, textured reds where the glaze application is thin. Glazes usually are painted on with a variety of flat brush widths to create an intentionally uneven surface. The glazes are mainly highly alkaline and use barium, lithium and sodium to achieve the coloration I require. They are often textured with combinations of granular rutile, granular ilmenite, granular manganese, silicon carbide and sand or decomposed rock.

In this work, I am searching for aged or archaic-looking surfaces. It is not to create instant antiques, but to build a sense of ambiguity into forms that can't be

traced to any particular culture. They become my gesture of respect to cultures past in general.



“Acorn Jar,” 2002, alkaline slip glaze, once fired in oxidation at cone 8. Size: 14" tall x 12" diameter.



“Lidded Bell Jar and Kylix Form,” 1985, thrown and constructed, matte alkaline slip glaze over slip trailing, once fired in oxidation at cone 8. Size: Jar is 17" tall; Kylix is 13" in diameter.



“Beggar Bowl,” 1981, thrown and constructed, matte alkaline slip glaze, once fired in oxidation to cone 8. Size: 9" tall x 6" diameter.



“Basket Form,” 2002, thrown and altered, alkaline slip glaze with underglaze pen drawing, fired in oxidation at cone 8. Size: 12" long x 6" deep.



“Ax Jar,” 1981, alkaline slip glaze with iron brushwork, once fired in oxidation at cone 8. Size: 19" tall x 8" wide.



“Pinax,” square plate, 1996, bronze glaze with trailed glazes over, reduction fired at cone 9. Size: 16" square.



“Skyphos,” 1981, thrown and constructed, layered alkaline glazes, fired in oxidation at cone 8. Size: 12" tall x 7" diameter.



“Handled Basket Form,” 1998, thrown form with thrown handles, reduction fired at cone 9.



“Cockade Jar,” 2001, thrown with thrown plume handle, alkaline slip glaze, oxidation fired at cone 8. Size: 14" tall x 8" diameter.



“Ax Jar,” 1981, bronze glaze, reduction fired at cone 9. Size: 17" tall x 7" diameter.

SOUTHWEST SERIES

This series is based on my responses to pottery of the indigenous peoples of the American Southwest and other ethnic groups who use black, red and white for their major forms of ceramic expression. This trio of colors and the objects they become part of were my earliest memories from preteen museum visits.

All of the works of this type that grace the museums of the world are made in low-fired earthenware. Since I generally work in porcelain, I researched all of the ways that it is possible to achieve the sort of color and surface that I wish to achieve. The objects are sprayed with a tin-opacified terra sigillata when bone dry and polished to a light sheen. The black/ bronze pigment brushwork patterns are then painted on. When dry, they are fired in oxidation to cone 9.



“Tri-Foot Bowl,” 1985, thrown and altered with cut foot, white terra sigillata and bronze pigment, once fired in oxidation to cone 9, refined with overglaze red to cone 6. Size: 4" tall x 18" diameter.

After the first firing, the pieces are decorated with red glaze by trailing and brushwork, and then they are re-fired to cone 08 in oxidation. Since this work is not intended for functional use, I use a number of chrome/lead mixtures in order to achieve the vibrancy of reds that I want. The chromium and tin react together to create a gray haze of fuming on the terra sigillata. Occasionally, a thin yellow line outlines the brush and trailer marks.



“Footed Parabolic Bottle,” white terra sigillata, bronze pigment, once fired to cone 8 in oxidation, trailed chrome red glaze fired at cone 06. Size: 17" tall x 5" wide.



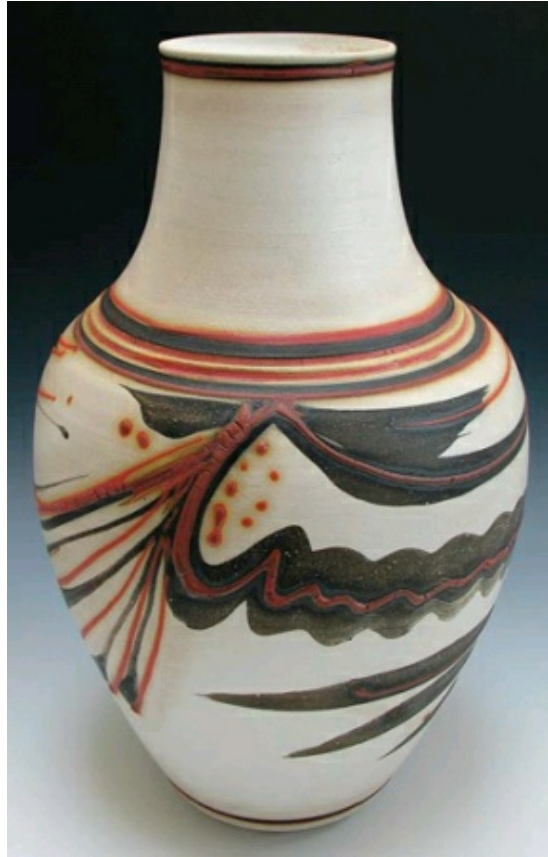
“Olla Form,” 1993, white terra sigillata, bronze pigment, once fired to cone 8 in oxidation, trailed chrome red glaze fired at cone 06. Size: 12" tall x 12" diameter.



“Deep Bowl,” 1983, white terra sigillata with black pigment, once fired to cone 9 in oxidation, refined with red overglaze to cone 6. Size: 5" tall x 4" diameter.



“Olla Form,” 1993, white terra sigillata, bronze pigment, once fired to cone 8 in oxidation, trailed chrome red glaze fired at cone 06. Size: 8" tall x 6" diameter.



“Vase,” 2001, white terra sigillata, bronze pigment, once fired to cone 8 in oxidation, trailed chrome red glaze fired at cone 06. Size: 16" tall x 10" diameter.



“Oval Bowl Form,” 1987, white terra sigillata with black pigment, once fired to cone 9 in oxidation, refined with red overglaze to cone 6, courtesy of the Winnipeg Art Gallery. Size: 6" tall x 10" wide. Photo by Ernest Mayer.



“Cut Bowl,” 2004, white terra sigillata, bronze pigment, once fired to cone 8 in oxidation, trailed chrome red glaze fired at cone 06. Size: 3" tall, 14" long x 7" wide.

CONCLUSION

Despite dubious beginnings, I've had an amazing life filled with wonderful people. I've traveled far and wide, seen remarkable things, dreamed much, learned a lot, taught a little, opened some eyes, bent some minds, enjoyed great support, eaten too much, stayed reasonably healthy thanks to Doctor Dan, made many pots, written many words, had sympathetic editors, been incredibly lucky, had two wonderful wives, sired three kids, acquired two others (all exceptional) and been given nine terrific grandkids. I've lived through some amazing history, made some good decisions, worked quite hard and opened some doors. All in all, it has been the most incredible, circuitous journey. If I could relive this last 67 years, I would hardly change a thing.

Who would've thought that all of this would come from a pile of blue clay in the devastated remains of bombed-out habitation in South London! Any frustrations? Yes! Not being a jazz musician and playing my trumpet. Maybe I'm destined for the horn section above or below in the next life; this was merely a taste!

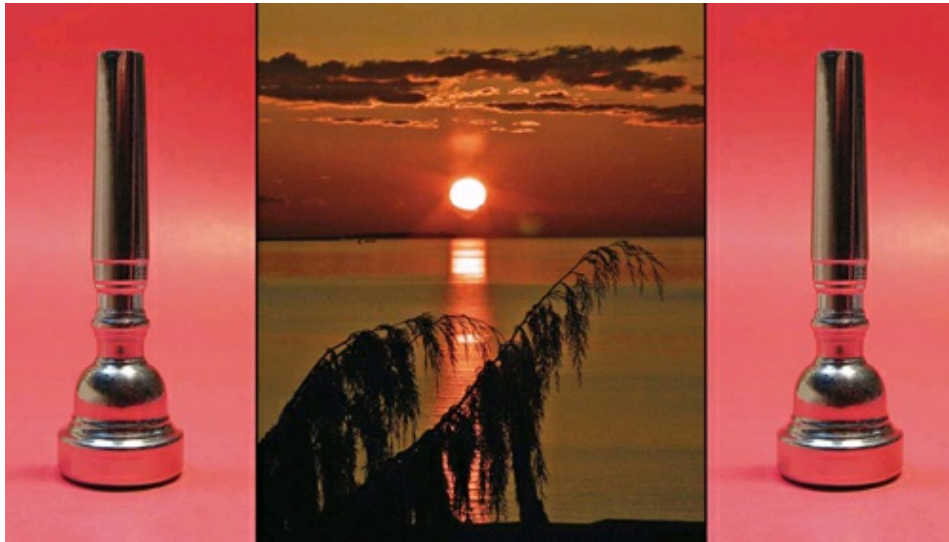
There is a very old Chinese proverb that goes something like this:

**If you want to be happy for a day — get drunk.
If you want to be happy for a week — get married.
If you want to be happy for a month — kill your pig and eat it.
If you want to be happy for a lifetime — build a garden.**

Thanks for the memories. My wife, family, studio, kitchen and garden need me!

**“The purpose of art is not the release of a momentary
ejection of adrenaline but rather the gradual, lifelong
construction of a state of wonder and serenity.”**

— Glenn Gould



CHRONOLOGY OF ROBIN HOPPER

LIFE HISTORY

1939: Born in Selsdon, Surrey, England.

1944-55: Completed formal education in Croydon, England.

1955: Entered Croydon College of Art. Initial studies in painting and drawing, printmaking, etching, engraving and wood engraving.

1956: Commenced studies in ceramics and lithography.

1960: Studied scenic design and painting in addition to ceramics and lithography. Graduated from college.

1960-65: Worked as an actor, stage designer, property maker and stage director both in London's West End and throughout England, Scotland and Wales (mainly winters).

1961-66: Worked as art consultant/travel guide escorting groups in Europe (summers).

1965: Set up pottery studio in Kintbury, Berkshire, England.

1965-68: Taught ceramics part time at Berkshire College of Art in Reading, Berkshire, England.

1968: Immigrated to Canada to teach at Central Technical School, Toronto, as head of Ceramics Department. Set up own studio in Toronto.

1970-73: Set up Ceramics and Glass Program and Department at Georgian College, Barrie, Ontario, Canada.

1970: Set up own studio at Hillsdale, Ontario, Canada. Exhibited work across Canada.

1972: Became Canadian citizen.

1972: Led workshop at Thunder Bay, Ontario.

1972: Resigned from teaching to be a full-time studio potter, complete with a team of four apprentices.

1977: Moved to Victoria, British Columbia, Canada, to establish a new studio. Selected as the first recipient of the Saidye Bronfman Award.

1977-2006: Developed own gallery in Metchosin, British Columbia, Canada, with aim of being selfsufficient from this gallery. By 1980, all sales of work are from this gallery.

1978-82: Taught part time at Lester B. Pearson College of the Pacific, Victoria, British Columbia, Canada.

1982: Began researching and writing a book on ceramic glaze and color development titled "The Ceramic Spectrum." The book was published in March 1984 by Chilton Book Co., Radnor, Pennsylvania. Launched new studio work in porcelain.

1983-84: Resided in Montreal for one year while doing ceramic historical research and preparation for second book.

1983-85: Researched and wrote a second book called "Functional Pottery: Form and Aesthetic in Pots of Purpose." Published in June 1986 by Chilton Book Co. Developed new work in porcelain and further glaze research.

1985-2006 Served as founder and director of the Metchosin International Summer School of the Arts, Victoria, British Columbia, Canada. Also served as an instructor specializing in glaze and color development for ceramic artists and teachers.

1988-2006: Developed new work in porcelain.

1992 Led lectures and workshops throughout North America in Colorado, Ohio, Virginia, Pennsylvania, Hawaii, Nevada, New Mexico, Ontario, Manitoba and British Columbia, and also at the Beijing Central Academy of Art and

Design in Beijing, China.

- 1993:** Served as consultant and on-camera host for “Making Marks,” a series of six educational videos on ceramic decoration processes.
- 1994:** Served as consultant and on-camera host for “Form and Function,” a series of five educational videos based on second book, “Functional Pottery.”
- 1995:** Led lectures and workshops in all states of Australia; also led United States workshops in North Carolina, Texas and California and Canadian workshops in British Columbia and Alberta.
- 1995:** Completed video productions of “Introduction to the Wheel” and “Advanced Throwing Techniques.”
- 1996:** Led workshops in Lansing, Mich.; Rochester, N.Y.; Logan, Utah, and Fredericton, Canada.
- 1997:** Concentrated on general production of both functional and one-of-a-kind work. Led workshops in Chicago and Quebec City.
- 1998:** Continued to produce both functional and one-of-a-kind work. Led workshops in Massachusetts, Connecticut, Maryland, Arizona, Texas and Florida.
- 1999:** Continued to produce both functional and one-of-a-kind work. Led workshops in Georgia, Louisiana, Texas, Missouri, New Mexico and North Carolina. Working on research for new editions of “The Ceramic Spectrum” and “Functional Pottery,” and revised a new edition of “Clay and Glazes for the Potter” by the late Daniel Rhodes. Served as guest artist at the Ichun Ceramic Festival, Ichun, Kyonggi-do, Korea.
- 2000:** Continued general production of both functional and one-of-a-kind work. Second edition of “Functional Pottery” published in January. Worked on third edition of “Clay and Glazes for the Potter” published in November. Led workshops in New York, Virginia, Nevada, Florida and Utah. Began working on second edition of “The Ceramic Spectrum,” which was later published July 2001 by Krause Publications Inc., Iola, Wis.

- 2001:** Continued general production of both functional and one-of-a-kind work. Led North American workshops in North Carolina, California, Arizona, Ohio and British Columbia. Second edition of "The Ceramic Spectrum" was published in June. Began researching material for a book on ceramic surface decoration techniques titled "Making Marks," which later was published in Fall 2004 by Krause Publications Inc.
- 2002:** Began working on new porcelain for group exhibitions in Vermont and Burlington, Ontario, Canada. Led workshops in Vermont, Ohio, Oregon, Colorado and South Carolina. Wrote new book titled "Stayin' Alive: Survival Tactics for the Creative Artist." Elected to the Royal Canadian Academy of Arts.
- 2003:** "Stayin' Alive" published in March 2003 by Krause Publications Inc. Served as a National Council on Education in the Ceramic Arts Conference panel moderator. Pursued new studio work in porcelain. Began writing "Making Marks." Led North American workshops in Oregon, Alberta and Florida.
- 2004:** "Making Marks" published in Fall 2004. Continued to pursue new studio work in porcelain. Led workshops in New York, Connecticut, Colorado and California. Continued general production of functional and one-of-a-kind work in porcelain.
- 2005:** Led workshops in Nevada, California (3), Tennessee (2), Texas (2) and Maryland. Delivered keynote speech for the Ontario Crafts Council Conference on Business and the Crafts. Served as moderator of Ceramics Writers Panel for NCECA Conference in Baltimore. Began writing "Robin Hopper Ceramics: A Lifetime of Works, Ideas and Teachings" for Krause Publications Inc.
- 2006:** Led workshops in Ontario, Canada; Also Keynote Speaker for the Potters' Council Conference, Sunnyvale, California: keynote speaker/presenter at the Michigan Art Education Association, Lansing, Mich.: keynote speaker/presenter for the Ceramic Arts Association of Israel, Tel Aviv, Israel: "Robin Hopper Ceramics" published December 2006: Participant in "UNIQUE" an exhibition celebrating the 30th Anniversary of the Bronfman Award, Canadian Museum of Civilization, Hull, Quebec.



“Cockade Jar,” 2001, thrown with thrown plume handle, alkaline slip glaze, oxidation fired at cone 8. Size: 14" tall x 8" diameter.

SOLO EXHIBITIONS

ENGLAND

1967: Burford, England.

CANADIAN PUBLIC GALLERIES

1978-81: “Explorations Within a Landscape” Bronfman Award Exhibition featured at Art Gallery of Greater Victoria, Victoria, British Columbia.; Burnaby Art Gallery, British Columbia; Kamloops Art Gallery, British Columbia; Malaspina Gallery, Nanaimo, British Columbia; Swift Current Exhibition Centre, Swift Current, Saskatchewan; Thunder Bay Art Gallery, Ontario; Ontario Crafts Council Gallery, Toronto; Burlington Art Gallery, Ontario; McMaster Art Gallery, Hamilton, Ontario; Coburg Art Gallery, Ontario; Peterborough Art Gallery, Ontario; Visual Arts Centre, Montreal; Mount St. Vincent University Gallery, Halifax, Nova Scotia; Memorial University Art Gallery, St. John’s, Newfoundland; Confederation Centre Art Gallery,

Charlottetown, Prince Edward Island; and Gallery of the New Brunswick Craft School, Fredericton, New Brunswick.

1981: “Explorations Within a Classical Theme” featured at Burnaby Art Gallery, British Columbia, and Visual Arts Centre, Montreal.

1987-1989 “Ceramic Explorations: 1957-1987.” This exhibition was initiated by Jane Mahut and cosponsored by the Koffler Gallery, North York, Ontario, and the Art Gallery of Greater Victoria. It was curated by Patricia Bovey, director of the Art Gallery of Greater Victoria, and the catalog was produced by Art Gallery of Greater Victoria. This traveling exhibition was 70 percent retrospective and 30 percent new work; it was shown at Koffler Gallery, October-December 1987: Art Gallery of Greater Victoria, January-March 1988; Madrona Centre, Nanaimo, British Columbia, November-December 1988; Winnipeg Art Gallery, Manitoba, April-May 1989: Prince George Art Gallery, British Columbia, October-November 1989.

OTHER CANADIAN GALLERIES

ONTARIO

1969: Solo Exhibition, Elliot Lake Centre, Ontario.

1970, 1974: Canadian Guild of Potters Gallery, Avenue Road, Toronto.

1973, 1976: Canadian Craft Gallery, Kingston; Petteplace Gallery, Hamilton, Ottawa.

1973: Petteplace Gallery, Hamilton, Ottawa.

1975: Ontario Crafts Council Gallery, Prince Arthur Street, Toronto.

1977: Ontario Crafts Council Gallery, Dundas Street, Toronto.

1978: Commercial Gallery, Ottawa.

1983: 20 percent solo exhibit plus guest curator for a group exhibition, “The Ceramic Spectrum,” in conjunction with the publication of first book at the

Ontario Crafts Council Gallery, Toronto.

MANITOBA

1976, 1978, 1979, 1980, 1986: Thomas Gallery, Winnipeg.

ALBERTA

1978, 1980: Rubaiyat Gallery, Calgary.

BRITISH COLUMBIA

1975, 1979: Galerie House of Ceramics, Hamilton Street, Vancouver.

1981: Lonsdale Gallery, Lonsdale Street, North Vancouver.

1981: “Explorations Within a Classical Theme” at the Burnaby Art Gallery, Burnaby.

1984: Out of Hand Gallery, Store Street, Victoria.

QUEBEC

1975: Canadian Guild of Crafts (Quebec), Montreal.

1982: Visual Arts Centre, Montreal.

1987: Galerie Alcan, Metiers d’art de Quebec, Quebec.

1989: “Masters of the Crafts” recipients of the Saidye Bronfman Award for Excellence in the Crafts, 1977-86 at the Canadian Museum of Civilization, Hull.

1998: “Transformation” Recipients of the Saidye Bronfman Award for Excellence in the Crafts, 1977-96. Canadian Museum of Civilization, Hull.

2006: “UNIQUE,” Recipients of the Saidye Bronfman Award 1977-2006,

Canadian Museum of Civilization, Hull, Quebec.

TWO-PERSON EXHIBITIONS

1984: Poterie Bonsecours, Montreal, Quebec, with Monique Ferron, ceramiste.

1982: Lonsdale Gallery, North Vancouver, British Columbia, with Sue Hara, potter.

1976: Ontario Crafts Council Gallery, Toronto, with Monique Beauregard, silk painter.

GROUP EXHIBITIONS

1969: Canadian National Exhibition, Toronto.

1969: Royal Ontario Museum, Toronto.

1970: Canadian National Exhibition, Toronto.

1971: Ontario Science Centre, Toronto.

1972: Canadian Ceramics '72, Royal Ontario Museum, Toronto.

1972: Canadian National Exhibition, Toronto.

1973: Ceramics International '73, Calgary, Alberta.

1973: Ontario Master Craftsmen, York University.

1974: Canadian National Exhibition, Toronto; received award for best porcelain.

1974: "Image '74," Hamilton Art Gallery, Ontario; received best in show award for best functional pottery.

1974: "Ontario Master Craftsmen," York University Art Gallery, Toronto, during

World Crafts Council Conference.

1976: “Crossroads,” Toronto, Ontario.

1976: Craft Collaborative, Toronto.

1976: “Down to Earth,” Hamilton, Ontario.

1976: Canadian National Exhibition, Toronto.

1976: National Ceramics, Calgary, Alberta.

1981: Ceramics Canada, Toronto.

1985-97: Annual Group Exhibition, “FIRED-UP!”, in Victoria, British Columbia.

1989-1993: “Masters of the Crafts/De Main de Maitres,” recipients of the Saidye Bronfman Award for Excellence in the crafts, 1977-86. Canadian Museum of Civilization, Hull, Quebec. This exhibition was one of the inaugural exhibits at the new museum and was part of a national tour that included the Canadian Crafts Museum, Vancouver; Burlington Art Gallery, Ontario; National Exhibition Centre, St. John, New Brunswick; National Exhibition Centre, Summerside, Prince Edward Island; Edmonton Art Gallery, Alberta; and the Winnipeg Art Gallery, Manitoba.

1998: “TRANSFORMATION,” a traveling exhibition of work by the first 20 recipients of the Bronfman Award, Canadian Museum of Civilization.

2006: “UNIQUE,” an exhibition of works by the first 30 recipients of the Bronfman Award, 1977-2006, and others, Canadian Museum of Civilization, Hull, Quebec.



“Clam Bowl,” 1981, three-colored agateware, gas fired at cone 9 in reduction, deep fluting. Inspired by snorkeling in Australia and looking at giant clam forms and surfaces. Size: 6" tal x 8" diameter.

U.S. EXHIBITIONS

1989: Solo Exhibition, Dade County Community College Gallery, Miami.

1991: Solo Exhibition, Museum of San Angelo, San Angelo, Texas.

1992: Solo exhibition, Appalachiana Gallery, Bethesda, Md.

EXHIBITION JUROR

1973-2000: Numerous regional, national and international exhibitions of both ceramic and multiple disciplines.

2001: Canada Council juror; first fine crafts awards.

MEDIA AND PUBLICATIONS

BOOKS

“The Ceramic Spectrum: A Simplified Approach to Glaze and Color Development.” Published in 1984 by Chilton Book Company, Radnor, Penn.; second edition published in June 2001 by Krause Publications Inc, Iola, Wis.

“Functional Pottery: Form and Aesthetic in Pots of Purpose.” Published in 1986 by Chilton Book Company, Radnor, Pennsylvania. Second edition published in 2001 by Krause Publications Inc., Iola, Wis.

“Clay and Glazes for the Potter.” Co-authored/co-edited a revised and expanded new edition of Daniel Rhodes’ major educational text published in 2000 by Krause Publications, Iola, Wis.

“Stayin’ Alive: Survival Tactics for the Visual Artist.” Published in 2003 by Krause Publications Inc., Iola, Wis.

“Making Marks: Discovering the Ceramic Surface.” Published in 2004 by Krause Publications Inc., Iola, Wis.

“Robin Hopper Ceramics: A Lifetime of Works, Ideas and Teachings.” Published in 2006 by Krause Publications Inc., Iola, Wis.

ESSAY

“Contemporary Focus: Studio Ceramics, Glass and Silver at the Winnipeg Art Gallery.” Published in 1992; expanded to form “Focus One: Contemporary Studio Ceramics in the Collection of the Winnipeg Art Gallery,” published 1997 by the Winnipeg Art Gallery.

ARTICLES

Note: This is a quick highlight — not a comprehensive listing — of articles and books that have featured Robin Hopper’s work in both ceramics and garden design.

1968: Featured portfolio/profile in Tactile magazine.

- 1970-73:** Wrote technical articles for Tactile magazine.
- 1973:** Subject of article, “Robin Hopper,” in Ceramics Monthly magazine.
- 1974:** Photographs of work shown in Craft Horizons magazine.
- 1975-76:** Wrote technical articles for Ceramic Review magazine.
- 1976:** Photographs of work featured in Ceramic Review magazine.
- 1977:** Featured portfolio/profile, “A Day in the Studio of Robin Hopper,” Ontario Craft Magazine.
- 1978:** Work shown in Ceramics Monthly magazine.
- 1979:** Work shown in Canada Crafts magazine..
- 1980:** Work shown in Australian Potter magazine.
- 1982:** Work featured in Australian Potter magazine.
- 1986:** Subject of a profile in Studio Potter Magazine.
- 1986:** Subject of “A Visit with Robin Hopper,” in Western Living magazine.
- 1988:** Work featured in Australian Potter magazine.
- 1988:** Subject of profile in Ceramics Monthly magazine.
- 1988-89:** Wrote series of articles on Glaze and Color for Ceramics Monthly magazine. This series of articles is used in conjunction with “The Ceramic Spectrum” as the basis of glaze and color development courses in colleges and universities in many countries around the world.
- 1991:** Subject of “Masters of Craft,” an article about five Bronfman Award recipients in Beautiful B.C. magazine.
- 2001:** Subject of “In Recognition,” a Ceramics Monthly feature profiling the 13 North American potters who have had the greatest impact on contemporary ceramics; Hopper is the only Canadian profiled.

2003: Subject of “Stinking Fish in Paradise,” an autobiographical article on the story behind ’Chosin Pottery, featured in Ceramics Monthly magazine.

EXHIBITION CATALOGUES

1978: “Explorations Within a Landscape,” catalog for the first traveling solo exhibition of a Bronfman Award recipient.

1987: “Ceramic Explorations: 1957-1987” by Patricia Bovey. Catalog for travelling exhibit cosponsored by the Koffler Gallery, Ontario, and the Art Gallery of Greater Victoria, Victoria, British Columbia.

1989: “Masters of the Crafts,” catalog profiling recipients of the Saidye Bronfman Award for Excellence in the Crafts, 1977-86. Canadian Museum of Civilization, Hull, Quebec.

1998: “Transformations,” catalog profiling recipients of the Saidye Bronfman Award for Excellence in the Crafts, 1977-86. Canadian Museum of Civilization, Hull, Quebec.

BOOKS FEATURING WORKS

“Ceramic Form,” by Peter Lane.

“Ceramica Viva,” by Nino Caruso.

“Ceramics Handbook,” by Glenn Nelson.

“Ceramics: Mastering the Art,” by Richard Zakin.

“Clay and Glazes for the Potter,” by Daniel Rhodes/Robin Hopper.

“Decorative Surfaces in Ceramics,” by Hildegard Storr-Britz.

“Down to Earth,” by Judith Ross and Nina Czegledy.

“Functional Pottery,” by Robin Hopper.

“Keramik der Welt,” by Gottfried Borrmann.

“Making Marks: Discovering the Ceramic Surface,” by Robin Hopper.

“The Art of Earth,” by Rona Murray and Walter Dexter.

“The Ceramic Spectrum,” by Robin Hopper.

“The Potter’s Manual,” by Kenneth Clark.

“Stayin’ Alive,” by Robin Hopper.

“Studio Ceramics,” by Peter Lane.

“Studio Porcelain,” by Peter Lane.

FILM

1974: “Introduction to Pottery,” Moreland Latchford, Toronto, 1974.

2002: “Showtime,” featuring with Robert Di Niro and Eddie Murphy, Warner Brothers Films, 2002.

TELEVISION AND VIDEO

Numerous television appearances in Ontario, British Columbia, Prince Edward Island, Nova Scotia, Australia, New Zealand and the United States of America, including:

1982-83: Consultant, host and narrator for “Glorious Mud,” an hour-long film on ceramics, as part of the Hand and Eye series, first shown in February 1984 by the Canadian Broadcasting Company.

1986: Robin Hopper Workshop Video, Sunnyvale, Calif.

1993: Consultant and on-camera host for six-part educational video series, “Making Marks: Ceramic Surface Decoration,” by Tara Productions, British Columbia, Canada.

1994: Consultant and on-camera host for five-part educational video series, “Form and Function,” by Tara Productions, British Columbia, Canada.

1995: Consultant and on-camera host for two educational videos, “Introduction to the Wheel” and “Advanced Throwing Techniques,” by Tara Productions, British Columbia, Canada.

2001: “Quiet Places: Pottery Retreat” by Omnifilm Productions, Vancouver.

2003: Art spots for Canadian Broadcasting Company.

AWARDS

Numerous awards in regional and national exhibitions, including:

1977: Saidye Bronfman Award for Excellence in the Crafts; first recipient.

1982: Received a Canada Council Explorations grant for work on first book, “The Ceramic Spectrum.”

1983: Received a Canada Council Project grant to assist in mounting “Ceramic Spectrum Exhibition” at the Ontario Crafts Council Gallery.

COLLECTIONS

Many public, corporate and private collections in North America, England, Germany, Japan, China, Korea, the Middle East, Australia and New Zealand, including The Canadian Museum of Civilization, The Art Gallery of Greater Victoria, The Winnipeg Art Gallery, Koffler Gallery, Ontario Crafts Council Gallery, Burlington Art Gallery, Confederation Centre Art Gallery, The Indusmin Collection, The Claridge Collection, Queensland Art Gallery (Australia), The Reading Museum (England), Beijing Academy of Art and Design (China) and city of Ichün, Korea.

MEMBERSHIPS

Founder and first president of Craft Collaborative, Ontario, Canada.

Founding member and first president (1979-1982) of Ceramists Canada.

Founding member and first president of Arts Vision Victoria Society.

Initiator and founding president emeritus of Metchosin International Summer School of the Arts.

Initiator of “FIRED-UP! Contemporary Works in Clay.”

Appointed (2000) and served as vice chairman (2001-2005) of British Columbia Arts Council.

Elected (2002) to the Royal Canadian Academy of Arts.

British Columbia representative (1979-1982) of Canadian Crafts Council.

Apprenticeship Committee member representing the Canadian Crafts Council on the World Crafts Council.

Life member of Ontario Crafts Council.

Member of Canadian Guild of Potters, Craftsmen’s Association of British Columbia: Canadian Guild of Potters, Craftsmen’s Association of British Columbia, Potter’s Guild of British Columbia, National Council for Education in the Ceramic Arts and the Craftsmen Potters’ Association of Great Britain.

Subscribing member of the American Crafts Council, Australian Crafts Council, British Columbia Potter’s Guild and British Crafts Council.



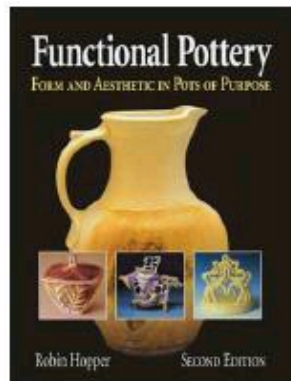
The Garden at 'Chosin Pottery, Meditation Garden, 2003. Photo by Robin Hopper.

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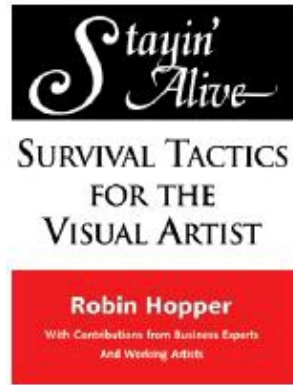
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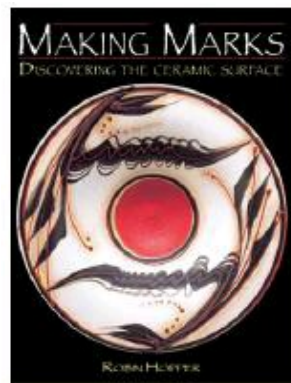
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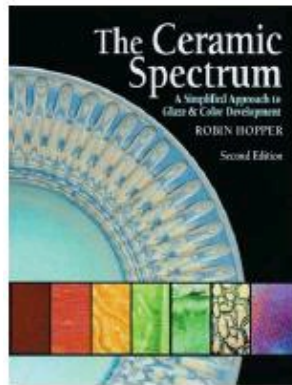
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