

The Role of the MOLD

by Andrew Martin

As makers we all “design.” Since the word *design* is a noun, a verb and an adjective it relates to conception, planning and the description of both the process and result. Design is not something we talk about much as ceramists, in part it seems, because making things in clay is done as a direct experience and expression, while design always appears as a step removed from the making process.

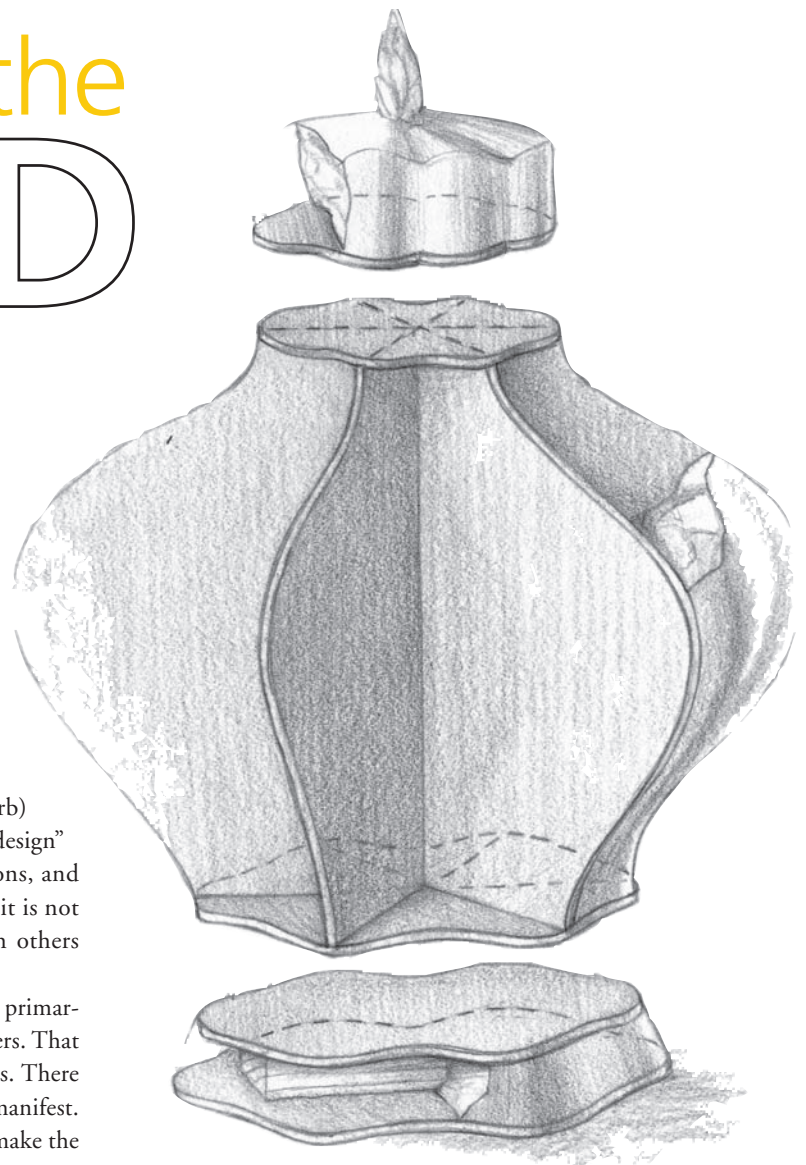
Design takes place as object (noun) and action (verb) simultaneously in the conceptual process. I can design a “design” in my head, fly through processes, visuals, glazing options, and then conceptualize a piece in a matter of moments, but it is not yet communicated in the world of the senses in which others can participate.

As visual artists we make our expressive communication primarily through the sense of sight, while not excluding the others. That communication must have a means for it to pass to others. There must be a plan for that conceptual idea (or design) to manifest. One must find and use the right means of expression. To make the concept full, right, and true involves thousands of decisions to turn a conceptual design into an object.

Working at a potters’ wheel, the decisions of the design process are done as unified tactile, kinesthetic and visual activity. The decisions made while working on a potters wheel—make it taller, give the belly more volume, leave this alone, emphasize or elaborate this or that, etc.—are elements of visual design occurring in a moment-to-moment activity. In this making process, the results of the actions, decisions and observations are nearly immediate.

The word “design” is one that too often is interpreted to mean the reduction of elements toward the minimal. Design must be appropriate whether it is minimal or maximized. As makers, or designer-craftsmen-artists, we have the choice and opportunity to minimize or maximize elements to what is appropriate for the design, but from where does the sense of “appropriate” emanate, and why?

Human beings and human brains are pattern-matching mechanisms. That is how we learn: by imitation. Once a pattern appears as



Martin has devised a template system for designing forms for mold making. See photographs on the following pages for more detailed explanations.

experience, there is an unconscious motion to match to pleasurable and successful patterns and eschew others. Within the realm of art, there is the tendency to duplicate patterns that exist or are known or experienced as standards of aesthetics.

Clary Illian quoted Bernard Leach as saying, “Followers of movements are always more doctrinaire than those that lead the movement” It would seem that he was commenting on “schools” of thought and action that grow up behind leaders of movements—the tendency to match the pattern of the leader.

While visiting Paul Soldner, he pointed to pots he made as a student of Peter Voulkos and said, “I call those ‘pots under the influence.’” So for a time, he matched the pattern of Voulkos and then moved on to a more personal expression. But how does one get to that more personal expression?



A series of templates that define the various sections of a covered jar are glued together, filled with clay, and scraped to the appropriate profile with a custom-made rib. With this system, the form can be altered in several ways at every step in the design process.

PHOTOS: NICK ELIAS—ILLUSTRATIONS: OLIVIER ROLLIN



"Ode to a Persian Mood," 14 in. (36 cm) in height, slip-cast porcelain, fired in an electric kiln to Cone 7.

Each individual inherently is wired differently, filters stimuli differently, and consequently manifests a different expression. Beyond that, understanding in detail the internal wiring and filtering processes is the in-depth examination that follows the initial successes and pattern-matching tendency of the human learning process. One could try every kind of ceramic process of forming, glazing and firing. What would be common to them all, based on this understanding of "wiring and filtering?" It is an evaluation of the objective forms to uncover the sources in the maker that generated them. Which

of the resulting pieces would most resonate with the maker, and why? Once one grasps this essential mechanism and understanding, it must be embraced. While this resonance can be most intimate and familiar, it can also be uncomfortable since it may exist outside existing patterns that are familiar and understandable to others.

For example, several elements comprise early life experiences that I resonated with and have come forward in the work. The mineral and butterfly collection at the local natural history museum and the geological formations in the Rocky Mountains imprinted sensibilities of shape, form, color, contrast in texture and surface, balance, asymmetry and incongruity. There were also projects involving paper cut-outs. It has been easy to identify these elements as they entered my work.

Later, seeing Minoan pots in Crete and Isnik tiles in Istanbul exposed me to a sense of form, decoration, color and beauty that was so primal that afterward it seemed as though I had just found my eyes and hands and a means to use them to make pottery. Ken Ferguson used to ask, "What do you do when the (creative) well runs dry?" "Find the source of the water," was my reply, and that is what happened in Crete and Istanbul.

Slip casting had been a part of my working cycle in conjunction with throwing on the wheel. Eventually, I dedicated myself fully to understating every aspect of pottery through the use of molds. It was an exploration of the language, molds, pottery, use, form, decoration, color, lids, feet, spouts, glazes, all rooted in bringing to life work that resonated every interest of butterflies, minerals, strange colors, water, plants, use, celebration, food, environment, ambience and.... Design has to include or entertain all these elements in a necessary regurgitation of beauty. While I

may not use all of these elements, to exclude any of them might exclude the essential component of the communication.

When I begin to design new pieces, rarely do I start with a formal idea. Rather it is a notion, yet often it's not even that. I begin to fold and cut paper shapes and either leave them symmetrical or cut them further and reassemble them in random configurations. Sometimes just a section of a cutout is extrapolated for further elaboration. From a few dozen cutouts, very few of the shapes will suggest a form. Paper cutouts allow a drawn line to be carried

into space, forming an outline of the resulting form. Further, it allows for an abstract and unforeseen result to occur while in the design process.

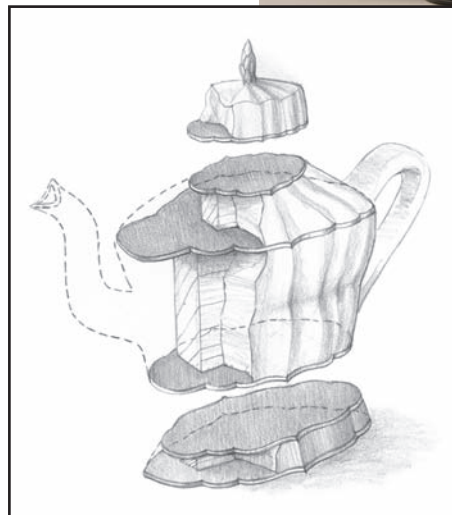
Depending on the scale of the cut-out shapes, different forms are possible. If it is short, a plate is possible; if it's made wider, a serving platter; if taller, a bowl; if it has a lid and a foot, the bowl becomes a casserole; and if very tall, a vase could result from the shape. A photocopier is used to reduce and enlarge the shapes. Then I make a visual evaluation of the possible forms. I draw in space with my hands and fingers to begin to sense the scale, mass, volume and space of the pot. Should it be plumper, have a wider foot, or be exaggerated in this or that manner?

Templates are made from the cut-outs and assembled in an armature on which to form the prototype in soft clay. Always watching to see what I could not see before each moment, new choices arise, subtleties of form play until the prototype is a finished facsimile of the finished pot.

The mold is a tool like the potters wheel, both of which have inherent opportunities and limitations. My ideas about pots are generally forms that are irregular and out of round. Molds are useful in making pots in quantity and with a reasonable weight. Yet it is ideas that have driven my choice of molds and slip casting rather than the technology itself. So the making of the mold, like every other part of the process, is always made appropriate to the prototype, making as few pieces as possible. This has led me to make innovations with molds, simply because I required the process to be as simple as possible, even if it has to be complex to work correctly.



"Essential Diversion," 9½ in (24 cm) in height, slip-cast porcelain, fired in an electric kiln to Cone 7.



Throughout the process I am looking forward and backward to see if there is a complimentary form suggested by the evolving prototype. How will the mold be made most simply? And I begin to see decoration and glazing possibilities and make notes and drawings about these options. All the while watching, observing and always anticipating magic. It occurs when I am no longer thinking but simply moving from instincts, notions and the "source" pouring through.

Glazing options are always temporary, mutable, inconclusive and ever varying. I wait until some notion of the surface appears. Sometimes it is weeks of walking around the studio looking at



Complex forms can be made from simple templates, and variations on a theme can be explored by altering the templates, the relationship between the templates, or the rib profile used to finish the contours. Other elements, such as handles and spouts can be cast separately and added as needed, but it is a good idea to "fit" the models before making the molds.



Left: An original plaster form is used to create a waste mold, the working interior surface of which is refined and cast with plaster. Middle: A positive plaster model is cast from the waste mold and is further refined until the final form is determined. Right: From the model, a production mold is made that is used to slip cast porcelain.



Shown here are four views of the same piece, rotated 90° in each view. In discussing these and other ceramic forms he makes, Penland, North Carolina, artist Tom Spleth explains: "These objects are ceramic objects and as such they have great fragility, which affects their metaphoric message. In the kiln, they are subject to the highest temperatures my formulations can endure and their fluidity in the heat affects their form. They are hollow and they are open at the top so they always refer to pottery, the vase and the history of ceramics. I keep the tops open so that one may see down into the translucency and see the thickness of the wall of the piece. I am very comfortable with the idea that my work is an extension of the history of ceramics."

SERVITUDE AND LOSS

by Tom Spleth

Mold making is a lot like printing lithographs. The process is indirect and arcane with much attention given to detail. One can make multiples and there is a great latitude for the expression of ideas and feelings. I am not much interested in design problems, but rather, I use molds as a tool to make a certain kind of object. The mold is a conversion device that changes heavy, solid models made of stone, wood and plaster into translucent, nearly weightless porcelain objects.

When I work, I travel from the general to the more specific. I begin in chaos and end in less chaos but there will always be some chaos—the objects are quite abstract. I pour the watery plaster out of its pail onto the floor in a large flat fluid puddle. In the time plaster takes to set—eight or ten minutes—I shape the progressively resistant material into a solid vertical form with trowels, scrapers and files. This act is akin to dancing with a partner that is constantly changing. As the plaster sets and becomes more intractable, I become more assertive and my actions are more dramatic. It is a clash of wills—my forms are made in confrontation with the material. At the end, I leave the field of battle in the presence of something that is new for me. The completed object catches a particular bit of information, about light, about the figure, about the ineffable, that is set apart and thereby revealed. It is as if I name things without using words.

I then begin to transform this wet, white, weighty plaster form by wrapping it with a mold. A mold is a complex, multipart thing that carries information. Where the object of desire resides therein, one can only find a void. The mold has no more than a temporary association with form both at its inception and its conclusion. A mold produces the object and is forgotten, unseen, discarded. It is a metaphor for servitude and loss.

Mold making requires discipline, attention, linear thought processes, an emotionally flat affect and a monastic devotion to the appropriate technologies. It is purely mechanical—the creative act has passed. When I make molds, I lose myself as I suspend ordinary interactive behavior with friends and loved ones. It is a necessary waste of time and that is its cost.

bisqueware. At other times, multiple solutions may appear in quick succession.

Molds are a language. As with any language you can write a technical manual or write poetry. I have always felt that the cold technicality of plaster and molds is not a limitation to them being used to express the lyrical notions of beauty that grow from the odd alchemy of my "wiring and filtering." The role of the mold in design is a supporting one, but ideas are the script by which it must act.

Bringing everything to the design and making process is essential to the artistic statement and to the aesthetic experience of the viewer. To minimize the "design" would both deprive delight in the making process and deprive the viewer/user enjoyment in the resulting "performance."

the author *Andrew Martin lives and works in Los Angeles, California, and is the author of The Essential Guide to Mold Making & Slip Casting (Lark Books, 2006).*