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Limitations on Expression
Involved in the
Materials and Certain Techniques
of
Ceramic Sculpture

Submitted by
Peter B. Riley

in Partial Fulfillment of
the Requirements for
the Degree of

Master of Fine Arts

School for American Craftsmen
Rochester Institute of Technology
Rochester, New York

May 31, 1961

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Materials and Certain Techniques
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I

The rain washed the mountains away, and when they were gone more mountains were made. The Arctic tern flew eleven thousand miles to the opposite pole, and in the East the lemming leapt into the sea. In the forest a tree died, decayed, and became food for the next tree to be born in that spot. The sun shone on the water and drew it into the sky to make rain. Ice came from the north and returned, leaving a new earth. The ocean came over the land, but the land rose again. Day came and then night, winter went and trees were born. These things happened and always will. They happen in a moving, humming rhythm, a rhythm that implies an order and balance. This great order of things appears around us in myriad ways, and yet we do not seem a part of it. We do not migrate or shed our coats. We do not have our young regularly nor do we hibernate. We do not go through metamorphosis or become food for other animals. Man may have done these things once; but the day, on a river bank, when he exchanged fish with another man for firewood, he became civilized and did them no more. Man, with his civilization, seems to be in opposition to the order of his environment. In fact man is the first phenomenon capable of destroying this order. Having always been aware, however dimly, of the

disparity between himself and the order of his environment, man has tried to establish an order and a balance of his own.

The artist reaches into the great balance around him for the components of his man-made order. Sculpture emerges in terms of space and form as a manifestation of his struggle for balance and order in an environment made hostile by himself. He uses the space between the mountains, the hush of the wind and the rocks of the land, the rhythms of the seasons and the balance of things that grow and fly, along with the tension of opposites, to manufacture compensation for his exclusion. With time the forms through which man expresses his compensation change, but never the reason for his expression.

II

Ceramic sculpture is simply sculpture made from clay. There are four peculiarities of clay which tend to channel the expression of ceramic sculpture into certain directions:

1. Clay comes from the earth, and it tends to stay there. The further it is taken from its natural state, the more it strains to return. The degree of this strain depends upon the type of clay and its treatment and

is limited by the fact that the only secure types of construction are pyramidal or suspended small pieces in some sort of matrix such as wall tiles.

2. Sculpture made from clay must have a certain dash, verve, or playfulness in its construction to sustain its life. Any strained effort or lack of freshness in the construction makes itself immediately apparent in the form. There is a parallel between the spontaneity of clay sculpture and Japanese or Chinese sumi painting in which the ink must be laid on the paper with utmost concentration and speed. The sensitive response mechanism of the clay requires that the sculptor must be very facile in his treatment or rely heavily on advance planning. An alternative to spontaneity or planning is to simply expect a large number of failures and repeats.
3. Clay sculpture must be hollow for technical as well as aesthetic reasons.
4. The only thing that can be done with clay sculpture that can not be done with anything else is that it can be glazed.

III

I maintain that the artist should control the medium. However, my experiments indicate the reverse is true. My thesis is a statement of this finding.

Essentially there are two types of form: formal and informal. These might also be called classical and baroque. By "form" I mean that physical shape whose translation by the observer is affected by light and the position of the viewer. Formal form is a subtle, delicate, highly controlled balance of relationships represented by Modrian, Albers, Arp, or Brancusi. Informal form is a much freer relationship of components in which subtlety is a by-product. I prefer the former and find that clay lends itself to the latter. Actually, I think that there is a middle ground between the two, but that a formal relationship must be well understood before liberties can be taken with it.

The reactions of clay to the sculptor's treatment are antithetical to a rigid and mathematical control of form. The clay shrinks, making it extremely difficult to determine what the finished size will be. This implies that anything with a number of components must be constructed *alla prima* to

establish their relative size. The shrinking, moreover, tends to soften the forms so that any detail must be grossly exaggerated. The clay warps, if not in drying then in the firing. Glazing, the only advantage that clay has over other media, also tends to be more informal. To be sure, within certain limits, the sculptor may be able to control glaze well but only with enormous practice. This is also true of the clay body, but the higher the fire the more unpredictable the results in all respects, and a higher fire is desirable because, in my opinion, the harder the product the more stonelike or metamorphic and satisfactory it became.

Most of the ceramic sculpture I have seen of any size has been fired at a low temperature in thick sections. If it was constructed from a higher fire clay, it embodied an informal relationship which had more of God than its maker in its genesis, such as the work of Voulkos or Mason. When I say any size, I mean over twenty inches high. With higher fire clays I found that twenty inches seemed to be the maximum height at which a piece would still remain under my control--at least with the existing kiln conditions. In order to construct a piece higher than twenty inches the sculptor

must make it in sections which join together in some way. In order to see what he is doing, he must be able to put the pieces together. This brings him to the difficulties of differentials in shrinkage. He is compelled by the requirements of strength to let the base pieces dry more, consequently their shrinkage is greater than that of the pieces which follow.

All of this makes it extremely difficult to control a formal relationship. Moreover, due to due to distortion in firing, there is no guarantee that pieces will fit together. Of all the techniques I tried, I found that, technically at least, the most controllable and simplest one was modeling from a solid lump, cutting it in half, and hollowing it out later. The trouble with this method is that the freedom and facility of the clay is lost due to the excessive handling and, worse, the piece loses the internal pressure so necessary in a really complete conclusion. That is, as with a well thrown pot, there is a subtle balance between the force from inside and the force from outside. In the case of a solid block the force is completely from the outside, and with shrinkage this force is even more exaggerated.

Slab constructions, though limited by their wooden quality, have always been a fertile line of endeavor for me. The shortcoming of the slab is that it seems to resist bending. I have never been able to make a slab construction with bent slabs that satisfied me. The bending always seemed to be a strain which might better be tolerated by some other material.

Thrown sculpture holds for me the least promise although I have spent the most time and effort with it. The inviolate roundness and the shell quality of cut forms is to me completely repelling. I seriously believe that the abstract perfection of a thrown form is quite enough without trying to put together numbers of them.

In two years of experimentation I have arrived at no overall conclusion but only the fragmentary ideas I have mentioned. Every step for me has been a trying struggle with the material and its technicalities which I maintain is wrong and wasteful. If I have any concrete conclusions regarding clay as a sculptural material, it is that pieces over twenty inches high, free standing and containing formal, keenly controlled rela-

tionships, are a waste of time. I do not say that time and dogged patience would not realize this control but only that it is a waste of time to try when there are so many other readily available materials that work better.

Free standing pieces under twenty inches seem to work fairly well but are not under control as much as I would like. Glazing is for me an unexplored area. I feel that painting rather than sculpture is the medium for color. Sculpture should be complete without color. However, because glaze, as noted above, is perhaps one of the only things that differentiated ceramic from any other type of sculpture, it is certainly a worthwhile field to investigate. Clay bodies that retain their crispness and shape in firing also merit exploration. In any event, experimentation in both glaze and clay is a frustrating, time-consuming process.

The alternative direction of informal, casual relationships is another area that I have not explored because my tastes seem to run to basic distilled forms that are tightly and formally related. Beyond these relationships I am unable to understand what I am doing. The more variables there are

in a relationship, the more confused I become and I very quickly have the feeling that what I am doing is senseless and capricious. The area of suspending ceramic components in a matrix such as metal, wood or some sort of mortar is again for me unexplored, although this seems to be the most promising direction to follow.

IV

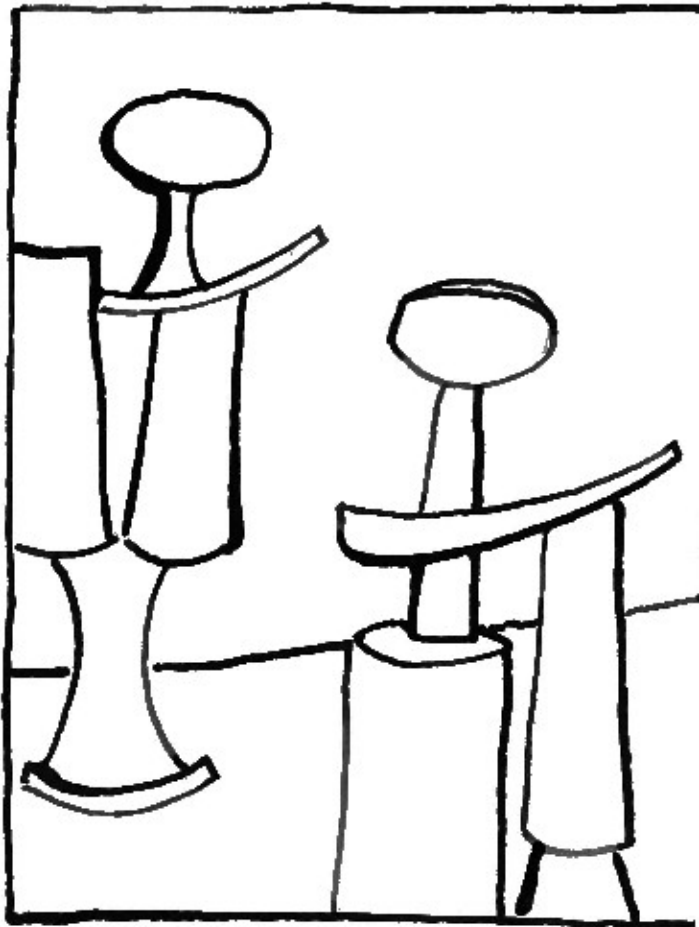
Thus, in conclusion, I have pursued several approaches to ceramic sculpture, which I have labeled as follows:

- Free standing, over twenty inches
- Free standing, under twenty inches
- Formal relationships
- Informal relationships
- Glaze and body technology
- Suspension in a matrix

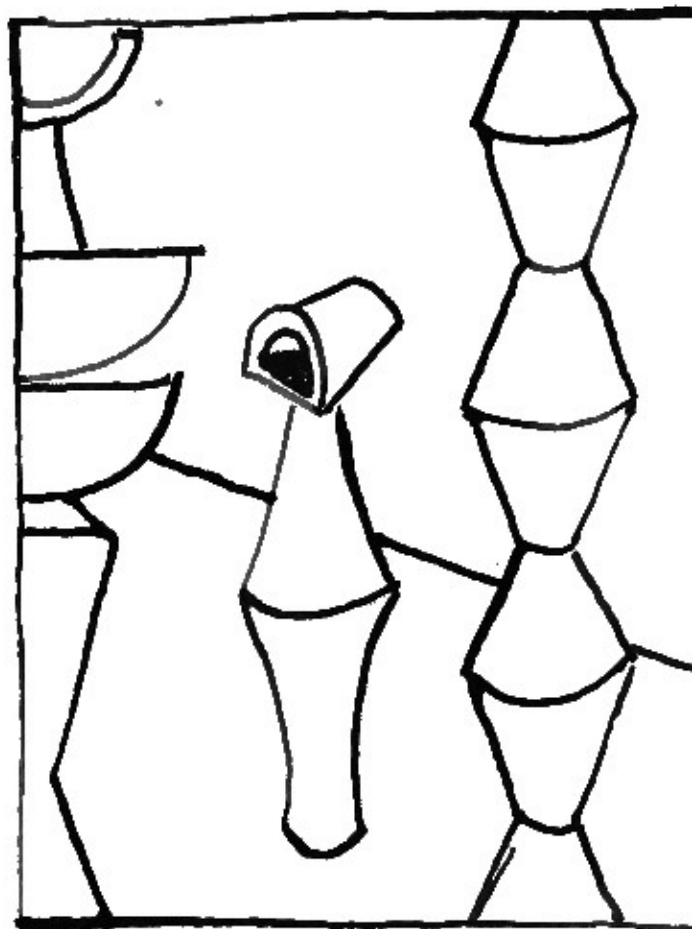
I have spent the bulk of my time trying to combine the first and third, finding that clay is an unsuitable material for this combination because it imposes severe limitations on sculptural expression.

V

When I first came to The School For American Craftsmen, I had my objectives only dimly in mind. In order to give



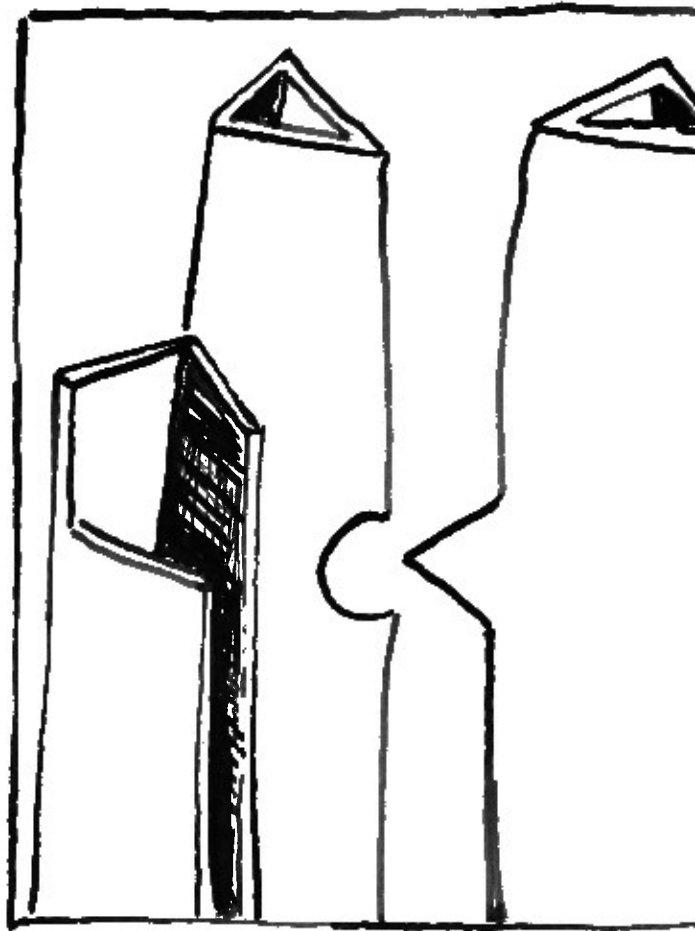
my work substance I arbitrarily decided to try some experiments with the human figure; because I could not throw well, I decided that these should be thrown. I had behind me several years of designing sculptural containers, weed holders, candle-holders, and similar objects constructed for the most part from slabs, and the transition to pure sculpture seemed most reasonable. My decision at this stage to attempt the human figure as a vehicle of expression was nearly fatal. My efforts to discover the expressive value of the figure completely destroyed any feeling for relationships and form that I may have had when I started. After two years of experiments, I am still utterly confused about working with the human figure. As the year passed I began to acquire some control over the relationships of thrown forms, but this achievement was largely obscured by my urge to express myself with the figure. By the end of the year the control of form was just starting to overcome my subservience to the figure, and I turned out a series of stiff totems that were reasonably sound. By the end of the first year I was exhausted and demoralized, and felt that I had achieved nothing but a little more insight into the meaning of the word "sculptural". I now realize that if I had not



committed myself to the figure but had started out with purely abstract relationships constructed with thrown forms, I would have progressed faster.

The following year I made a few more totems that were very similar to the ones of the previous spring. Then suddenly I realized that almost anything could be a human figure depending upon how you looked at it. A telephone pole, a bottle, a plant form all suddenly took on a human aspect that I had never seen before. With this simple revelation the problem became much simpler because I was free of the clumsy anatomical framework to which I had previously been chained. Next I made another series of totems that were purely abstract and only remotely human. Then I started thinking about using these figures for a fountain. Unfortunately I was still not able to rid myself completely of the idea of a conventional figure.

My problem was now threefold. The variables of figure, form, and fountain flowed together in my thinking. Finally I decided on a grouping of triangular columns made of loosely assembled slabs which contained a symbol for their human



element. I felt that these triangular forms were quite successful in that the variables I had been working with blended together quite nicely.

The last direction that I attempted promised to be the most exciting, but I hardly got started. Since I had made all my fountains vertical, I decided to try something flat and horizontal, and I experimented with cast blocks with negative forms carved out of them in which water flowed as in a river bed. The most important development of this last direction was that I managed to free myself completely from the figure.

My thinking has moved progressively farther from sculptural pottery vessels toward pure abstract sculpture, and away from clay as a material. The failure that I have experienced with the figure is a problem that I would like to solve, although after my first encounter I am afraid to try again. As I look through my sketches for the last two years, I am very pleased to see an orderly progression in my thinking and planning. This sustained development has been a new and worthwhile experience for me, although I feel it has

been exasperatingly slow because of my difficulty with clay as a medium. If I had worked in other materials, I am sure that I could have moved much faster. Thus I am convinced that I should investigate a multi-material approach to sculpture.