

A Study on the Construction of the Relationship between Form and Space in Contemporary Ceramic Sculpture

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Abstract: As the concept of sculpture in the context of contemporary art has been changing from a closed system to an open field, the focus of creation and research in ceramic sculpture has moved beyond a single focus on form and technique, now exploring how the formal language of ceramic sculpture interacts with space. This paper will investigate how to use form and space in the creation of contemporary ceramic sculptures. First, based on morphology, we will study how the extension and contraction of form, the cohesion and openness of structure, and the material expression of physical properties require and create spatial potential. Next, it will investigate how the three dimensions of physical space, virtual space and conceptual space are transformed and concretised in the formal language. Finally, it puts forward that there is an "intertextual construction mechanism" of form and space, and the two serve as anchor points and contexts for each other to achieve an ontological reconstruction of ceramic sculpture as a relational "event" in a state of dynamic equilibrium. The first is to build a general system of spatial relationships for the research on the form and aesthetic value of creativity in modern ceramic sculptures.

Keywords: Ceramic Sculpture, Formal Language, Spatial Relationship, Construction, Intertextuality

Introduction

In line with the general direction of contemporary art to focus on field, process and relation, ceramic sculpture has begun to explore spatial problems in its creative work more consciously. However, most of the previous research has focused on the development of stylistic forms or the innovation of materials and techniques, and has not systematically studied the dynamic and constructive relationship between formal configuration and multi-dimensional space. The above deficiency has prevented us from fully appreciating both the art and the ideas behind modern ceramic sculpture. Thus, to clarify the interactive mechanism of its formal language and spatial relations at the ontological level is not only a theoretical distillation and elevation of specific creative works but also an essential academic route for integrating the study of ceramic sculpture into the broader discourse system of contemporary art. This paper will not be a work analysis; rather, according to the three steps of progressive morphological analysis, spatial dimension translation and exploration of intertextual mechanisms, it will uncover how form and space are jointly produced and determined, thus revealing the essential constructive logic and aesthetic value of contemporary ceramic sculpture.

1. Morphological Analysis of the Formal Language of Ceramic Sculpture and Its Spatial Potential

1.1 The Definition of Spatial Occupation by Extension and Contraction of Form

Ceramic sculptures have taken shape, and they are used to express both occupation and division of space. The form of extension is the shape of the active expansion of volume in external space, and through radiating lines, expanded masses, cantilevered structures, etc., it physically invades and modifies the surrounding void. This is not just an increase in space; rather, it is a type of directional force field that, through directivity and tension of form, makes the observer feel that the area around it has been activated. On the other hand, the contraction of form is shown by an inward convergence of volume to create a space that feels closed in and has an introspective mood due to depressions, holes or compact clusters. Although contracted form takes up less space, it can also strengthen the sense of

boundary and density of the form to create the impression of a small, intimate psychological world^[1].

The dialectical relationship of extension and contraction is the basic way for the dialogue between form and space. Ceramic sculptures generally have a certain style and create a sense of place by employing contrasts in various aspects. The expanded parts of the form spread out the space and connect it with the outside world, and the contracted parts are in the centre and thus become the focal points for both sight and emotion. Modifications in the treatment of space do not only refer to changes in size but also to alterations in the weight and energy of a place; thus, this foundation provides a way to present relationships among various places.

1.2 The Guidance of Spatial Flow by Structural Cohesion and Openness

Structure is the internal organisation that supports the form and determines how it is organised in space. It has a relatively small number of formal units in the core area, and the links among these parts are generally closed or semi-closed; thus, it is an independent unit with a distinct boundary. The above kind of structure is a static, centripetal spatial experience; the flow of space is relatively slow and usually stops at the surface of the form, and the viewer's eyes are led to converge within the structure. It can provide an absolute and fixed place for the subject in relation to its environment, and a double relationship can also be shown in terms of space.

At the same time, without being self-sufficient, it also uses many other ways to introduce emptiness and other elements of the work, such as overlap, layering, framing or gridding. No longer does it try to contain the space; instead, it guides the space to enter, become intertwined with and be shaped by the sculpture. Both the visible path and the imagined path have an organisation and are bent by solid shapes and empty spaces; thus, people can feel that space is continuous, ever-changing, and rhythmic. An open structure does not need to be a single work of art; instead, it can also be a space that is both felt and created, and many new spaces can be formed with all kinds of connections and links.

1.3 The Interaction Between the Material Expression of Physical Properties and Spatial Perception

The physical properties of ceramic materials are also part of the formal language and affect the texture and temperature of the space. The warmth or coldness, lightness or darkness, transparency, etc., of glaze colours directly affect the mood of a place. A warm, opaque glaze will reduce the amount of light, making the object appear darker and more intimate; thus, it will have an introverted and gentle mood. At the same time, a cool and crystalline glaze or a translucent celadon glaze can reflect and refract light to give the shape a light and simple appearance, and add some depth and an illusion of space. The texture of the surface of a material can be either smooth as a mirror or rough as rock; in terms of light, it will have different degrees of diffusion, and people will also feel different sensations when touching it^[2].

Ceramics will have some physical attributes after firing, such as being heavy in hand, brittle, and having other mould marks; these will also add to the sense of space. It is a thin-walled porcelain, but it has a light and diffuse sense of space and does not appear heavy. At the same time, a work that keeps the marks of clay-slab bending or wheel-throwing materialises the process of change over time in its form and thus adds a sense of temporality to the spatial experience. The physical properties of materials are no longer just a passive basis for shape; now they are active means that can generate sensory information and communicate with the world through energy. Through interaction with the actual situation of materials, ceramic sculptures can express not only the spatial arrangement of objects but also deep connotations of material poetics and phenomenological aesthetics.

2. Translation and Presentation of Spatial Dimensions in the Form of Ceramic Sculpture

2.1 The Intervention of Physical Space and the Adaptive Variation of Form

As the environment in which ceramic sculptures are created, physical space has a certain size, shape, and limit, and it is also the starting point for all other changes in form. A work is placed in a certain place and, according to the qualities of that area, it takes on a different shape. Given that the space is either very high or very low, the form may be tall and slender or short and broad; correspondingly, in open or small spaces, the horizontal spread of the form will be limited. This is not to be assumed; rather, it is the result of the formal language actively incorporating parameters of physical space, such as viewing distance, angle and light, into its own grammatical system to form an integrated visual work

with the sculpture and the site. The above characteristics indicate that the formal logic of the sculpture has already incorporated a "prediction" and "response" to its environment, and thus, by simulating a conversation with the particular circumstances of that space, the final form of the work has been realised.

Adaptation of Form is also manifested in the predetermined bodily experience and path of movement for the viewer. The shape, size and opening of the sculpture suggest that one should walk around it, go through it or stop for a moment to think. Intervention in physical space should no longer be centered on a single object but should be a "spatial arrangement", and the formal logic of such an arrangement can absorb patterns of human behaviour and sequences of perception in space. Through the above intentional modifications, various feelings and ideas about a particular place can be inspired in ceramic sculpture, and the environment will be revealed more deeply. The key to this translation is that the form is no longer just an object in space; rather, it is a way to organise spatial order and lead both sight and bodily sensation, and every alteration in form is a slight rearrangement and redefinition of the power structure of space^[3].

2.2 The Creation of Virtual Space and the Construction of Negative Form in Sculpture

Virtual Space refers to the non-physical parts that are defined, enclosed or implied by a physical form; it functions as an active element and should be given the same weight in the spatial construction of ceramic sculpture as the physical form. The artificial construction of space is a new kind of form that does not create objects but rather arranges existing ones in relation to emptiness. Thus, one can actively create a negative space; apertures, cavities, gaps, and the voids formed by the interaction of forms are no longer mere backdrops or passive remnants but are, in fact, visual elements with their own forms, light and rhythm. The Shape, size and degree of transparency of the negative form directly affect the visual effect and sense of space in the picture.

The essence of negative form construction is to use form to represent "emptiness" and thus make the viewer's vision move back and forth between solid and empty, creating a sense of layered space and rhythm. A finely tuned negative space can be used to block or scatter light, create a draft, and draw attention to a particular area in the picture. Thus, the boundary of the solid form is the interface that produces virtual space, and its concavities, turns and openings directly shape the characteristics of this virtual space; that is, it can be deep and peaceful or open and airy. Here, the task of form is not only to present itself but also to create an expressive "nothingness" by defining "emptiness", and thus to construct a richer and more tense spatial totality through the dialectical interdependence of solid and void. The construction shows how the traditional Chinese aesthetic idea of "treating the blank as the black" has been transformed in contemporary three-dimensional form; virtual space is no longer "void" but an essential place for the flow of energy and the creation of meaning, and here the dynamic power of form can be expressed and extended^[4].

2.3 The Externalization of Conceptual Space and the Symbolic Distillation of Form

Conceptual space is the non-physical space created by a work of art, which exists in the viewer's mind and culture, and originates from the artist's ideas and cultural connotations. The main way to express this abstract space is to use symbols in the form of ceramics. Formal elements no longer describe things directly but are simplified, altered or combined to become symbols with certain ideas. These symbols may be based on abstractions of nature, or they may have been ideologically given geometric forms; their meaning is to point to a conceptual world that lies beyond the physical place. Symbolic distillation is not only a reduction in form but also an extraction and refinement of meaning; thus, form can be separated from specific references and gain the capacity for various interpretations, thus reaching the realm of concepts.

The process of symbolic distillation is to reduce the number of words and extract the essential metaphorical and symbolic power of form. A frequent motif of cracks may refer to the scope of time and memory; an ordered arrangement of stacked shapes can be used to represent ideas of development and organisation. The cultural qualities and craftsmanship heritage of ceramics are also intrinsic to the material and have been integrated into the system of symbols to add another layer of meaning. Thus, Form is reduced to coordinates and an entrance into the realm of ideas, so one can move beyond the superficial appearance of the object and access a rich system of meanings related to culture, life experience, and thought. Thus, what the sculpture creates is not only a space for sight and body but also a world of spirit and idea. In short, the externalisation process of ceramic sculpture is a way to present

abstract ideas in concrete form, and as an object in space, it can inspire people's imagination and contemplation of the world of ideas.

3. The Intertextual Construction Mechanism between Form and Space

3.1 The Stability and Centrifugal Force of Form as a Spatial Anchor

In terms of the construction of intertextuality, the form of a ceramic sculpture is first a necessary support in space; thus, through its actual existence and visual weight, one can feel a sense of stability for the fluid and transient nature of space. Stability is due to the form's honest response to gravity, scale and material; thus, it becomes an undeniable spatial fact around which all other spatial relationships take place. The Configuration, Texture and Volume of the form determine the particular quality of the anchor—whether it is to be a sturdy and substantial core or a delicate and sensitive presence—and thus provide a preliminary sense of the mood and energy of the space. The first is to establish the origin of the coordinate system for spatial experience and provide a fixed reference point from which all other movement in space can be measured.

However, the formal anchor of contemporary ceramic sculpture is often neither fixed nor closed. Tension, directivity and a sense of incompleteness in its form result in a centrifugal force. Centrifugal force can be obtained by means of asymmetry, dynamic tilt, a tendency for fragmentation, or lines that point outwards in the environment. A centrifugal force is exerted on the surrounding void, so it is non-uniform and unsteady; thus, there will be drawn-out, irregular motion as well as invisible vortices or trajectories. Stability and centrifugal force are a pair of contradictory but harmonious forces; the former guarantees that a work can exist and be recognized in space, and the latter creates a spatial relationship by moving from a static state of "surrounding" to a dynamic state of "extension" and "interaction", thus initiating an endless conversation between form and space. The existence of a centrifugal force shows that people have an innate desire to move and a rich source of energy; thus, sculpture is no longer seen as a static picture but as a space that can convey and express this will to move^[5].

3.2 Space as the Context for Form: Situational Generation and Meaning Attribution

The intertextual device of space is no longer just a passive vessel for meaning; rather, it has become an active medium in the creation of this meaning. A specific place, such as a white-cube exhibition hall, an old building, nature, a virtual field, etc., has its own history, size, light and shadow, and function, and together they create a particular environment for showing art. A ceramic sculpture placed in a particular space will be perceived differently and carry various connotations that are not inherent in the shape of the sculpture itself. A rustic ceramic work at a heritage site can be linked to archaeology and material culture, but the same work can also be shown in a minimalist contemporary style to draw attention to its form and material purity. Space can restrict or expand the range of interpretation for formal symbols and thus lead to different understandings of them.

The basic source of situational generation is the interaction and integration of the spatial environment and the symbolic system of form. Space has both physical attributes (such as the direction and quality of light, ambient sound and temperature) and non-physical qualities (such as the memory of a place and cultural connotations), and together they can evoke or alter the potential semantic directions of form. Space needs to be created to convey the meaning of the work in its final form; it is not just the background of the work but a space that can also add semantic richness and concreteness to it. At this time, the meaning of the form becomes open-ended, context-dependent, and inherently flexible; finally, its interpretation will be the result of interaction and cooperation between the spatial environment and the formal text. This negotiation process shows that the "site-specificity" of a work of art is very important: its whole aesthetic expression cannot be separated from the specific place where it is displayed, and space itself is an essential factor and an active element in the creation of meaning.

3.3 Contemporary Reconstruction of the Ontology of Ceramic Sculpture under Dynamic Equilibrium

The final goal of intertextual construction is to achieve a modern reconstruction of the artistic ontology of ceramic sculpture through the continuous and dynamic interplay of form and space. The first is that the new cannot be treated as a fixed, closed object according to tradition. Sculpture is no

longer considered an autonomous work with fixed meanings; rather, it is now an "event" that is continuously "occurring" in a particular place. The ontology of it is precisely the interaction of energy with the environment, its encounter with the viewer's perception, and the change in meaning that occurs in different situations. Ontology is no longer a "thing" with fixed boundaries; rather, it is a "state" or "process" that depends on a network of relations^[6].

This reconstruction is also extended to the dimensions of material and idea. Ceramics have good basic material properties, such as fine craftsmanship, fragility and cultural connotations, so new expressive paths can be found in applying them to modern spatial concepts, such as site-specificity, virtual space and relational aesthetics. The process of formal generation may be intentionally brought to the forefront, the intervention of space can be anticipated in the logic of creation, and the "completed state" of the work may have fluctuating boundaries. Therefore, the ontology of ceramic sculpture is now considered to be an "entity in relation"; it is an art form that maintains a dynamic balance and is continuously renewed by the tension among physical attributes, spatial environments and cultural ideas. It is no longer a traditional craft, but now it has been adopted by contemporary artists to explore how space is created through various materials. The reconstructed ontology has produced the qualities of "generativity" and "relationality", and its value is no longer limited to the excellence of form and technique but also lies in its ability to start, continue and heighten a tense yet productive dialogue with space and with the viewer.

Conclusion

Based on the reasons above, this paper proposes that the creation of spatial relations in contemporary ceramic sculpture is an intermittent process driven by the intrinsic possibilities of the formal language; these potentials are realised through an active translation of spatial dimensions and finally achieve intersection with other texts (intertextuality). Morphology is a combination of form, structure and material that provides the foundation for the creation of space, and the spatial dimensions of physical, virtual and conceptual are fields for the translation and realisation of meaning. In addition, through the intertextual devices of "stability and centrifugal force", "situational generation" and "dynamic equilibrium", the artistic ontology of ceramic sculpture has been radically reformed; it is no longer considered the result of craftsmanship but rather an "event" that is constantly changing in a specific network of relations. The above theoretical basis will help us better understand the current changes in ceramic sculpture and provide new ideas for creation and critique in the future. Based on the above foundation, more research can be conducted to investigate all kinds of influences that digital virtual spaces, cross-media environments and specific sociocultural contexts have on the construction of spatial relationships in ceramic sculpture, thus expanding the theoretical horizon of this field.

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