

diluted by an inherited format, variations of a form, mild contrasts and connecting parts and areas. European art had to represent a space and its contents as well as have sufficient unity and aesthetic interest. Abstract painting before 1946 and most subsequent painting kept the representational subordination of the whole to its parts. Sculpture still does. In the new work the shape, image, color and surface are single and not partial and scattered. There aren't any neutral or moderate areas or parts, any connections or transitional areas. The difference between the new work and earlier painting and present sculpture is like that between one of Brunelleschi's windows in the Badia di Fiesole and the façade of the Palazzo Rucellai, which is only an undeveloped rectangle as a whole and is mainly a collection of highly ordered parts. [...]

6 Robert Morris (b. 1931) 'Notes on Sculpture 1-3'

Like Judd, Morris argues a claim to the Modernist inheritance in competition with the claims made by critics such as Greenberg and Fried on behalf of the abstract painting and sculpture of the 1960s. Although he begins by expanding the term 'sculpture' to cover a wider-than-normal range of avant-garde practices, he comes to adopt Judd's designation of them as 'three-dimensional work'. However, unlike Judd's his arguments were marked by an interest in gestalt theory and the European tradition of construction in art. His principal interests lie in the character of the sculptural object or situation as a determinant upon the spectator's experience, and, increasingly, in the exemplary character of forming techniques. Traditional Modernist theory tends implicitly or explicitly to distinguish the values of Modernism from the interests of scientific and technical modernization. To Morris, on the other hand, manufacture is an activity definitive of human existence; it follows that the use of industrial materials and processes should be seen as entirely *natural* to the modern artist. First published in three issues of *Artforum*, *New York*: vol. 4, no. 6, February 1966, pp. 42-4; vol. 5, no. 2, October 1966, pp. 20-3; vol. 5, no. 10, Summer 1967. Parts I and II were printed as conventional essays, from which the present versions are taken; part III as a series of nineteen isolated and non-sequential paragraphs, of which ten are reprinted here. (For 'Notes on Sculpture, Part 4' see VIB4.)

Part I

'What comes into appearance must segregate in order to appear.'

Goethe

[...] In the interest of differences it seems time that some of the distinctions sculpture has managed for itself be articulated. To begin in the broadest possible way it should be stated that the concerns of sculpture have been for some time not only distinct from but hostile to those of painting. The clearer the nature of the values of sculpture becomes the stronger the opposition appears. Certainly the continuing realization of its nature has had nothing to do with any dialectical evolution that painting has enunciated for itself. The primary problematic concerns with which advanced painting has been occupied for about half a century have been structural. The structural element has been gradually revealed to be located within the nature of the literal qualities of the support. It has been a long dialogue with a limit. Sculpture, on the other hand, never having been involved with illusionism could not possibly have based the efforts of fifty years upon the rather pious, if somewhat contradictory, act of giving up this illusionism

and approaching the object. Save for replication, which is not to be confused with illusionism, the sculptural facts of space, light, and materials have always functioned concretely and literally. Its allusions or references have not been commensurate with the indicating sensibilities of painting. If painting has sought to approach the object, it has sought equally hard to dematerialize itself on the way. Clearer distinctions between sculpture's essentially tactile nature and the optical sensibilities involved in painting need to be made.

Tatlin was perhaps the first to free sculpture from representation and establish it as an autonomous form both by the kind of image, or rather non-image, he employed and by his literal use of materials. He, Rodchenko, and other Constructivists refuted Apollinaire's observation that 'a structure becomes architecture, and not sculpture, when its elements no longer have their justification in nature.' At least the earlier works of Tatlin and other Constructivists made references to neither the figure nor architecture. In subsequent years Gabo, and to a lesser extent Pevsner and Vantongerloo, perpetuated the Constructivist ideal of a non-imagistic sculpture that was independent of architecture. This autonomy was not sustained in the work of the greatest American sculptor, the late David Smith. Today there is a reassertion of the non-imagistic as an essential condition. [...]

[...] Mondrian went so far as to claim that 'Sensations are not transmissible, or rather, their purely qualitative properties are not transmissible. The same, however, does not apply to *relations* between sensations. ... Consequently only *relations* between sensations can have an objective value ...' This may be ambiguous in terms of perceptual facts but in terms of looking at art it is descriptive of the condition that obtains. It obtains because art objects have clearly divisible parts that set up the relationships. Such a condition suggests the alternative question: Could a work exist that has only one property? Obviously not, since nothing exists that has only one property. A single, pure sensation cannot be transmissible precisely because one perceives simultaneously more than one property as parts in any given situation: if color, then also dimension; if flatness, then texture, etc. However, certain forms do exist that, if they do not negate the numerous relative sensations of color to texture, scale to mass, etc., do not present clearly separated parts for these kinds of relations to be established in terms of shapes. Such are the simpler forms that create strong gestalt sensations. Their parts are bound together in such a way that they offer a maximum resistance to perceptual separation. In terms of solids, or forms applicable to sculpture, these gestalts are the simpler polyhedrons. [...] In the simpler regular polyhedrons, such as cubes and pyramids, one need not move around the object for the sense of the whole, the gestalt, to occur. One sees and immediately 'believes' that the pattern within one's mind corresponds to the existential fact of the object. Belief in this sense is both a kind of faith in spatial extension and a visualization of that extension. In other words, it is those aspects of apprehension that are not coexistent with the visual field but rather the result of the experience of the visual field. The more specific nature of this belief and how it is formed involve perceptual theories of 'constancy of shape,' 'tendencies toward simplicity,' kinesthetic clues, memory traces, and physiological factors regarding the nature of binocular parallax vision and the structure of the retina and brain. Neither the theories nor the experiences of gestalt effects relating to three-dimensional bodies are as simple and clear as they are for two-dimensions. But experience of solids establishes the fact that, as in flat forms, some configurations are dominated by wholeness, others tend

to separate into parts. This becomes clear if the other types of polyhedrons are considered. In the complex regular type there is a weakening of visualization as the number of sides increases. A sixty-four-sided figure is difficult to visualize, yet because of its regularity one senses the whole, even if seen from a single viewpoint. Simple irregular polyhedrons, such as beams, inclined planes, truncated pyramids, are relatively more easy to visualize and sense as wholes. The fact that some are less familiar than the regular geometric forms does not affect the formation of a gestalt. Rather, the irregularity becomes a particularizing quality. Complex irregular polyhedrons (for example, crystal formations) if they are complex and irregular enough can frustrate visualization almost completely, in which case it is difficult to maintain one is experiencing a gestalt. Complex irregular polyhedrons allow for divisibility of parts insofar as they create weak gestalts. They would seem to return one to the conditions of works that, in Mondrian's terms, transmit relations easily in that their parts separate. Complex regular polyhedrons are more ambiguous in this respect. The simpler regular and irregular ones maintain the maximum resistance to being confronted as objects with separate parts. They seem to fail to present lines of fracture by which they could divide for easy part-to-part relationships to be established. I term these simple regular and irregular polyhedrons 'unitary' forms. Sculpture involving unitary forms, being bound together as it is with a kind of energy provided by the gestalt, often elicits the complaint among critics that such works are beyond analysis.

Characteristic of a gestalt is that once it is established all the information about it, *qua* gestalt, is exhausted. (One does not, for example, seek the gestalt of a gestalt.) Furthermore, once it is established it does not disintegrate. One is then both free of the shape and bound to it. Free or released because of the exhaustion of information about it, as shape, and bound to it because it remains constant and indivisible.

Simplicity of shape does not necessarily equate with simplicity of experience. Unitary forms do not reduce relationships. They order them. If the predominant, hieratic nature of the unitary form functions as a constant, all those particularizing relations of scale, proportion, etc., are not thereby canceled. Rather they are bound more cohesively and indivisibly together. The magnification of this single most important sculptural value — shape — together with greater unification and integration of every other essential sculptural value makes, on the one hand, the multipart, inflected formats of past sculpture extraneous, and on the other, establishes both a new limit and a new freedom for sculpture.

Part II

Q: Why didn't you make it larger so that it would loom over the observer?

A: I was not making a monument.

Q: Then why didn't you make it smaller so that the observer could see over the top?

A: I was not making an object.

— Tony Smith's replies to questions about his six-foot steel cube.

The size range of useless three-dimensional things is a continuum between the monument and the ornament. Sculpture has generally been thought of as those objects not at the polarities but falling between. The new work being done today falls between the extremes of this size continuum. Because much of it presents an image of neither

figurative nor architectonic reference, the works have been described as 'structures' or 'objects.' The word *structure* applies either to anything or to how a thing is put together. Every rigid body is an object. A particular term for the new work is not as important as knowing what its values and standards are.

In the perception of relative size the human body enters into the total continuum of sizes and establishes itself as a constant on that scale. One knows immediately what is smaller and what is larger than himself. It is obvious, yet important, to take note of the fact that things smaller than ourselves are seen differently than things larger. The quality of intimacy is attached to an object in a fairly direct proportion as its size diminishes in relation to oneself. The quality of publicness is attached in proportion as the size increases in relation to oneself. This holds true so long as one is regarding the whole of a large thing and not a part. The qualities of publicness or privateness are imposed on things. This is because of our experience in dealing with objects that move away from the constant of our own size in increasing or decreasing dimension. Most ornaments from the past, Egyptian glassware, Romanesque ivories, etc., consciously exploit the intimate mode by highly resolved surface incident. The awareness that surface incident is always attended to in small objects allows for the elaboration of fine detail to sustain itself. Large sculptures from the past that exist now only in small fragments invite our vision to perform a kind of magnification (sometimes literally performed by the photograph) that gives surface variation on these fragments the quality of detail it never had in the original whole work. The intimate mode is essentially closed, spaceless, compressed, and exclusive.

While specific size is a condition that structures one's response in terms of the more or less public or intimate, enormous objects in the class of monuments elicit a far more specific response to size *qua* size. That is, besides providing the condition for a set of responses, large-sized objects exhibit size more specifically as an element. It is the more conscious appraisal of size in monuments that makes for the quality of 'scale.' The awareness of scale is a function of the comparison made between that constant, one's body size, and the object. Space between the subject and the object is implied in such a comparison. In this sense space does not exist for intimate objects. A larger object includes more of the space around itself than does a smaller one. It is necessary literally to keep one's distance from large objects in order to take the whole of any one view into one's field of vision. The smaller the object the closer one approaches it and, therefore, it has correspondingly less of a spatial field in which to exist for the viewer. It is this necessary greater distance of the objects in space from our bodies, in order that it be seen at all, that structures the non-personal or public mode. However, it is just this distance between object and subject that creates a more extended situation, for physical participation becomes necessary. Just as there is no exclusion of literal space in large objects, neither is there an exclusion of the existing light.

Things on the monumental scale, then, include more terms necessary for their apprehension than objects smaller than the body, namely, the literal space in which they exist and the kinesthetic demands placed upon the body.

A simple form like a cube will necessarily be seen in a more public way as its size increases from that of our own. It accelerates the valence of intimacy as its size decreases from that of one's own body. This is true even if the surface, material, and color are held constant. In fact it is just these properties of surface, color, material, that get magnified into details as size is reduced. Properties that are not read as detail in large works become

detail in small works. Structural divisions in work of any size are another form of detail. [...] There is an assumption here of different kinds of things becoming equivalent. The term 'detail' is used here in a special and negative sense and should be understood to refer to all factors in a work that pull it toward intimacy by allowing specific elements to separate from the whole, thus setting up relationships within the work. Objections to the emphasis on color as a medium foreign to the physicality of sculpture have also been raised previously, but in terms of its function as a detail a further objection can be raised. That is, intense color, being a specific element, detaches itself from the whole of the work to become one more internal relationship. The same can be said of emphasis on specific, sensuous material or impressively high finishes. A certain number of these intimacy-producing relations have been gotten rid of in the new sculpture. Such things as process showing through traces of the artist's hand have obviously been done away with. But one of the worst and most pretentious of these intimacy-making situations in some of the new work is the scientific element that shows up generally in the application of mathematical or engineering concerns to generate or inflect images. This may have worked brilliantly for Jasper Johns (and he is the prototype for this kind of thinking) in his number and alphabet paintings, in which the exhaustion of a logical system closes out and ends the image and produces the picture. But appeals to binary mathematics, tensegrity techniques, mathematically derived modules, progressions, etc., within a work are only another application of the Cubist aesthetic of having reasonableness or logic for the relating parts. The better new work takes relationships out of the work and makes them a function of space, light, and the viewer's field of vision. The object is but one of the terms in the newer aesthetic. It is in some way more reflexive because one's awareness of oneself existing in the same space as the work is stronger than in previous work, with its many internal relationships. One is more aware than before that he himself is establishing relationships as he apprehends the object from various positions and under varying conditions of light and spatial context. Every internal relationship, whether it be set up by a structural division, a rich surface, or what have you, reduces the public, external quality of the object and tends to eliminate the viewer to the degree that these details pull him into an intimate relation with the work and out of the space in which the object exists.

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While the work must be autonomous in the sense of being a self-contained unit for the formation of the gestalt, the indivisible and undissolvable whole, the major aesthetic terms are not in but dependent upon this autonomous object and exist as unfixed variables that find their specific definition in the particular space and light and physical viewpoint of the spectator. Only one aspect of the work is immediate: the apprehension of the gestalt. The experience of the work necessarily exists in time. *The intention is diametrically opposed to Cubism with its concern for simultaneous views in one plane.* Some of the new work has expanded the terms of sculpture by a more emphatic focusing on the very conditions under which certain kinds of objects are seen. The object itself is carefully placed in these new conditions to be but one of the terms. The sensuous object, resplendent with compressed internal relations, has had to be rejected. That many considerations must be taken into account in order that the work keep its place as a term in the expanded situation hardly indicates a lack of interest in the object itself. But the concerns now are for more control of and/or cooperation of the entire situation. Control is necessary if the variables of object, light, space, body, are to

function. The object itself has not become less important. It has merely become less *self* important. [...]

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Part III Notes and Nonsequiturs

Structures. Such work is often related to other focuses but further, or more strongly, emphasizes its 'reasons' for parts, inflections, or other variables. The didacticism of projected systems or added information beyond the physical existence of the work is either explicit or implicit. Sets, series, modules, permutations or other simple systems are often made use of. Such work often transcends its didacticism to become rigorous. Sometimes there is a puritanical scepticism of the physical in it. The lesser work is often stark and austere, rationalistic and insecure.

The trouble with painting is not its inescapable illusionism *per se*. But this inherent illusionism brings with it a non-actual elusiveness or indeterminate allusiveness. The mode has become antique. Specifically, what is antique about it is the divisiveness of experience which marks on a flat surface elicit. There are obvious cultural and historical reasons why this happens. For a long while the duality of thing and allusion sustained itself under the force of profuse organizational innovations within the work itself. But it has worn thin and its premises cease to convince. Duality of experience is not direct enough. That which has ambiguity built into it is not acceptable to an empirical and pragmatic outlook. That the mode itself – rather than lagging quality – is in default seems to be shown by the fact that some of the best painting today does not bother to emphasize actuality or literalness through shaping of the support.

It is not in the uses of new, exotic materials that the present work differs much from past work. It is not even in the non-hierarchic, non-compositional structuring, since this was clearly worked out in painting. The difference lies in the kind of order which underlies the forming of this work. This order is not based on previous art orders, but is an order so basic to the culture that its obviousness makes it nearly invisible. The new three-dimensional work has grasped the cultural infrastructure of forming itself which has been in use, and developing, since Neolithic times and culminates in the technology of industrial production.

There is some justification for lumping together the various focuses and intentions of the new three-dimensional work. Morphologically there are common elements: symmetry, lack of traces of process, abstractness, non-hierarchic distribution of parts, non-anthropomorphic orientations, general wholeness. These constants probably provide the basis for a general imagery. The imagery involved is referential in a broad and special way: it does not refer to past sculptural form. Its referential connections are to manufactured objects and not to previous art. In this respect the work has affinities with Pop art. But the abstract work connects to a different level of the culture.

Much work is made outside the studio. Specialized factories and shops are used – much the same as sculpture has always utilized special craftsmen and processes. The shop methods of forming generally used are simple if compared to the techniques of advanced

industrial forming. At this point the relation to machine-type production lies more in the uses of materials than in methods of forming. That is, industrial and structural materials are often used in their more or less naked state, but the methods of forming employed are more related to assisted hand craftsmanship. Metalwork is usually bent, cut, welded. Plastic is just beginning to be explored for its structural possibilities; often it functions as surfacing over conventional supporting materials. Contact molding of reinforced plastics, while expensive, is becoming an available forming method which offers great range for direct structural uses of the material. Vacuum forming is the most accessible method for forming complex shapes from sheeting. It is still expensive. Thermoforming the better plastics – and the comparable method for metal, matched die stamping – is still beyond the means of most artists. Mostly the so-called industrial processes employed are at low levels of sophistication. This affects the image in that the most accessible types of forming lend themselves to the planar and the linear.

The most obvious unit, if not the paradigm, of forming up to this point is the cube or rectangular block. This, together with the right angle grid as method of distribution and placement, offers a kind of 'morpheme' and 'syntax' which are central to the cultural premise of forming. There are many things which have come together to contribute to making rectangular objects and right angle placement the most useful means of forming. The mechanics of production is one factor: from the manufacture of mud bricks to metallurgical processes involving continuous flow of raw material which gets segmented, stacked, and shipped. The further uses of these 'pieces' from continuous forms such as sheets to fabricate finished articles encourage maintenance of rectangularity to eliminate waste.

Tracing forming from continuous stock to units is one side of the picture. Building up larger wholes from initial bits is another. The unit with the fewest sides which inherently orients itself to both plumb and level and also close packs with its members is the cubic or brick form. There is good reason why it has survived to become the 'morpheme' of so many manufactured things. It also presents perhaps the simplest ordering of part to whole. Rectangular groupings of any number imply potential extension; they do not seem to imply incompleteness, no matter how few their number or whether they are distributed as discrete units in space or placed in physical contact with each other. In the latter case the larger whole which is formed tends to be morphologically the same as the units from which it is built up. From one to many the whole is preserved so long as a grid-type ordering is used. Besides these aspects of manipulation, there are a couple of constant conditions under which this type of forming and distributing exists: a rigid base land mass and gravity. Without these two terms stability and the clear orientation of horizontal and vertical might not be so relevant. Under different conditions other systems of physical ordering might occur. Further work in space, as well as deep ocean stations, may alter this most familiar approach to the shaping and placing of things as well as the orientation of oneself with respect to space and objects.

Such work which has the feel and look of openness, extendibility, accessibility, publicness, repeatability, equanimity, directness, immediacy, and has been formed by clear decision rather than groping craft would seem to have a few social implications, none of

which are negative. Such work would undoubtedly be boring to those who long for access to an exclusive specialness, the experience of which reassures their superior perception.

The rectangular unit and grid as a method of physical extension are also the most inert and least organic. For the structural forms now needed in architecture and demanded by high speed travel the form is obviously obsolete. The more efficient compression-tension principles generally involve the organic form of the compound curve. In some way this form indicates its high efficiency – i.e., the ‘work’ involved in the design of stressed forms is somehow projected. The compound curve works, whereas planar surfaces – both flat and round – do not give an indication of special strength through design. Surfaces under tension are anthropomorphic: they are under the stresses of work much as the body is in standing. Objects which do not project tensions state most clearly their separateness from the human. They are more clearly objects. It is not the cube itself which exclusively fulfills this role of independent object – it is only the form that most obviously does it well. Other regular forms which invariably involve the right angle at some point function with equal independence. The way these forms are oriented in space is, of course, equally critical in the maintenance of their independence. The visibility of the principles of structural efficiency can be a factor which destroys the object’s independence. This visibility impinges on the autonomous quality and alludes to performance of service beyond the existence of the object. What the new art has obviously not taken from industry is this teleological focus which makes tools and structures invariably simple. Neither does it wish to imitate an industrial ‘look.’ This is trivial. What has been grasped is the reasonableness of certain forms which have been in use for so long.

New conditions under which things must exist are already here. So are the vastly extended controls of energy and information and new materials for forming. The possibilities for future forming throw into sharp relief present forms and how they have functioned. In grasping and using the nature of made things the new three-dimensional art has broken the tedious ring of ‘artiness’ circumscribing each new phase of art since the Renaissance. It is still art. Anything that is used as art must be defined as art. The new work continues the convention but refuses the heritage of still another art-based order of making things. The intentions are different, the results are different, so is the experience.

7 Michael Fried (b. 1939) ‘Art and Objecthood’

This was Fried’s riposte to the claims of Judd and Morris, whom he designates as ‘literalists’. Attacking what he identifies as a corrupted sensibility, Fried reiterates the ‘abstractionist’ account of Modernism and of its distinguishing characteristics and virtues. In Fried’s view it is a symptom of the decadence of literalist art that it theatricalizes the relation between object and beholder, whereas the experience of authentic Modernist art involves the suspension both of objecthood and of the sense of duration. First published in *Artforum*, Summer 1967, from which the present text is drawn. This special issue devoted to ‘American Sculpture’ also included the third of Morris’s ‘Notes on Sculpture’ (see VIIA6),