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The process of “algebrization,” the over-automatization of an object, permits the greatest economy of perceptive effort. Either objects are assigned only one proper feature—a number, for example—or else they function as though by formula and do not even appear in cognition.

Victor Shklovsky
“Art as Technique”

Consider the following three documents: The first is an article entitled “Sol LeWitt—The Look of Thought,” by the critic Donald Kuspit. The second is a book-length essay called Progress in Art by the artist and writer Suzi Gablik. The third is the critic Lucy Lippard’s contribution to the catalogue for the LeWitt retrospective at the Museum of Modern Art.

Taken together these essays put forward a set of claims, addressed initially to the work of a specific artist, but extended to the larger context of abstract art in general, or at least to the abstract art of LeWitt’s generation. What these claims amount to is a declaration of the mission and achievement of this abstraction. It is, they collectively assert, to serve as triumphant illustration of the powers of human reason. And, we might ask, what else could Conceptual Art be?

Kuspit signals this grand theme with the title of his essay. “The Look of Thought” is what stares back at us from the modular structures, the openwork lattices, the serial progressions of LeWitt’s sculpture. Thought, in Kuspit’s terms, is deductive, inferential, axiomatic. It is a process of finding within the manifold of experience a central, organizing principle; it is the activity of a transcendental ego.

“In LeWitt,” Kuspit writes, “there is no optical induction; there is only deduction by rules, which have an axiomatic validity however much the work created by their execution has a tentative, inconsequential look.” And, he continues, “rationalistic, deterministic abstract art links up with a larger Western tradition, apparent in both classical antiquity and the Renaissance, viz., the

pursuit of intelligibility by mathematical means. This tradition is profoundly humanistic in import, for it involves the deification of the human mind by reason of its mathematical prowess.”

The specific work in which Kuspit sees this deification of the human mind in operation is called Variations of Incomplete Open Cubes (1974). It is a modular structure composed of 122 units, each a member of a finite series, the series ordered in terms of a numerical progression. Throughout the series the “cube” as such is given only inferentially, initially by providing the least possible information (three edges set perpendicular to one another), and then progressively supplying more of the missing edges, ending with the greatest possible information (eleven edges). Each of the modules in the series is eight inches on a side; each is painted white; and the 122 skeletal structures are assembled on a vast platform.

“The viewer,” Kuspit informs us, “completed the incomplete cubes by mentally supplying the missing edges, and experienced the tension between the literally unfinished and the mentally finished cubes—between what Kant would call the phenomenal cube and the idea of the cube.”

For almost no writer who deals with LeWitt is there any question that these geometric emblems are the illustration of Mind, the demonstration of rationalism itself. “At times,” one critic writes, “the most elaborate of these constructions resemble translations of complex philosophical systems into a purely formal language. If anyone could perceive the structural beauty of, say, Descartes’s or Kant’s treatises and then go on to recreate them as exclusively visual metaphor, it is surely LeWitt.”

There may of course be readers of this kind of criticism who balk at statements of this sort. They may find it strange that in the last quarter of the twentieth century there should have arisen an art dedicated to a triumphant Cartesianism, that when almost everything else in our cultural experience has instructed us about the necessity of abandoning the fantasy of the transcendental subject, LeWitt should be capable of reassuring us about its powers.

For if I see myself putting to sea, and the long hours without landfall, I do not see the return, the tossing on the breakers, and I do not hear the frail keel grating on the shore. I took advantage of being at the seaside to lay in a store of sucking-stones. They were pebbles but I call them stones. Yes, on this occasion I laid in a considerable store. I distributed them equally among my four pockets, and sucked them turn and turn about.

But the power of human reason has captured the imagination of a number of contemporary writers on art, for whom abstraction is necessarily the outcome of

2. Ibid., p. 43.
Sol LeWitt. 122 Variations of Incomplete Open Cubes. 1974. 122 structures, painted wood, each 8 by 8 by 8 inches; base, 182 plywood squares, each 2 by 12 by 12 inches; 131 pen and ink drawings and photographs. (Installation, Museum of Modern Art, New York.)
the triumphant progress of rationality. It is instructive, therefore, to think about the claims that are made for LeWitt in the context of a broader argument about the nature of abstraction. Suzi Galik's *Progress in Art*, for example, views the entire range of the world's visual culture as a problem in cognitive development. And abstract art, set within this problematic, appears as the necessary fruits of some kind of world intellectual growth.

Put very briefly, her argument is that the history of art divides into three distinct periods, the first consisting of all visual representation prior to the discovery of systematic perspective, the second, beginning with the Renaissance, defined by the mastery of perspective, and the third, that of modernism, heralded by the onset of abstraction. As one might gather from the title of her book, the author's contention is that these divisions mark off stages in a radical progression, each stage outmoding and superseding the one that came before it. The model for this idea of "progress in art" is that of human cognitive development, beginning with the most childlike modes of thought and moving forward towards the greater complexity of operational, formal reasoning. Projecting this developmental model of the individual, taken from the work of Piaget, onto the entire corpus of world art, Gablik speaks of the history of styles as a matter of "advance"—a process of "evolution" towards stages of increasingly higher intellectual organization. "The history of art exemplifies fundamental patterned principles of mental growth," she writes.5 Thus the Renaissance superseded all previous forms of representation because of the axiomatic, deductive nature of perspective, so that the space of the phenomenal world could be understood as unified by a system of coordinates independent of "raw" perception. But the modern period (beginning with Cubism) cognitively outdistances the Renaissance by withdrawing this power of coordination from the real world entirely. In so doing it demonstrates the independence of all deductive or logical systems from the process of observation. In Gablik's view the achievement of abstract art is its freedom from the demands of perceptual reality and its ambition to demonstrate what Piaget has termed the "formal-operational stage" of human thinking.

This raised a problem which I first solved in the following way. I had say sixteen stones, four in each of my four pockets these being the two pockets of my trousers and the two pockets of my greatcoat. Taking a stone from the right pocket of my greatcoat, and putting it in my mouth, I replaced it in the right pocket of my greatcoat by a stone from the right pocket of my trousers, which I replaced by a stone from the left pocket of my trousers, which I replaced by a stone from the left pocket of my greatcoat, which I replaced by the stone which was in my mouth, as soon as I had finished sucking it.

It is not surprising that LeWitt's defenders would find much to admire in the thesis of *Progress in Art*. For an argument that draws a direct parallel between

Piaget’s “genetic epistemology” and the course of several millenia of aesthetic endeavor necessarily places artists of LeWitt’s generation at the “formal-operational stage” of development, as manipulators of a propositional logic far “in advance” of anything that has come before it. Indeed, Lucy Lippard, in her essay for the Museum of Modern Art catalogue on LeWitt, claims that Gablik’s description of this type of thinking applies most securely to the work of this artist. “It is only LeWitt’s ‘reflective abstraction,’” Lippard maintains, “that fully fits into these theories, only his work that can be said to articulate ‘the moment in artistic thinking when a structure opens to questioning and reorganizes itself according to a new meaning which is nevertheless the meaning of the same structure, but taken to a new level of complexity.’”

Thus there were still four stones in each of my four pockets, but not quite the same stones. And when the desire to suck took hold of me again, I drew again on the right pocket of my greatcoat, certain of not taking the same stone as the last time. And while I sucked it I rearranged the other stones in the way I have just described. And so on.

In speaking of Lippard and Kuspit as defenders of LeWitt’s work I do not mean to imply that anyone who disputes their view of it is automatically a detractor. Rather I am focusing on a particular type of defense. It is one that undoubtedly finds its rhetorical force and psychological energy in reaction to the hostility that is generally directed at work like LeWitt’s. This hostility is rather muted inside the self-immured space of the art world, where LeWitt is considered a contemporary master, but outside those walls it is extremely pronounced. LeWitt’s white lattices, serially disposed or not, are viewed by the audience of a wider culture as baffling and meaningless. For after all, what could they possible represent? To which the answer comes, as outlined above: they are representations of Mind. Freed at last from making pictures of things in the world, the artist is depicting the cognitive moment as such.

But this solution did not satisfy me fully. For it did not escape me that, by an extraordinary hazard, the four stones circulating thus might always be the same four. In which case, far from sucking the sixteen stones turn and turn about, I was really only sucking four, always the same, turn and turn about.

For these writers the cognitive moment has a particular form, assumes a particular shape. From the references to Descartes and the allusions to Euclidean diagrams, it is obvious that the form it takes is a kind of centering of thought—the discovery of a root principle, an axiom by which all the variables of a given system might be accounted for. It is the moment of grasping the idea or theorem that both generates the system and also explains it. Seen as being interior to the system, and constituting the very ground of its unity, the center is also visualized as being

above or outside it. Hence Kuspit’s wish to link the idea of pure intelligibility, which he sees as the goal of LeWitt’s art, with the notion of transcendence.

For no matter how I caused the stone to circulate, I always ran the same risk. It was obvious that by increasing the number of my pockets I was bound to increase my chances of enjoying my stones in the way I planned, that is to say one after the other until their number was exhausted. Had I had eight pockets, for example, instead of the four I did have, then even the most diabolical hazard could not have prevented me from sucking at least eight of my sixteen stones, turn and turn about. The truth is I should have needed sixteen pockets in order to be quite easy in my mind.

But in stating the conditions by which abstract art might be freed from the obligation to picture the world, this kind of critical argument merely substitutes a
new obligation. Abstract art is no longer tested by the faithfulness by which it transcribes appearances; it is now to be tested by its transparency to a different model. Visual reality no longer has a privileged status with relation to the work of art, no longer forms the text which the art is to illustrate. Now it is logic that constitutes the “text”; and the space onto which the art is now to open, the model it is to “picture” and by which it is to be tested is Mind.

LeWitt’s art would, of course, fail this test. His math is far too simple; his solutions are far too inelegant; the formal conditions of his work are far too scattered and obsessional to produce anything like the diagram of human reason these writers seem to call for.

And for a long time I could see no other conclusion than this, that short of having sixteen pockets, each with its stone, I could never reach the goal I had set myself, short of an extraordinary hazard. And if at a pitch I could double the number of my pockets, were it only by dividing each
pocket in two, with the help of a few safety-pins let us say, to quadruple them seemed to be more than I could manage. And I did not feel inclined to take all that trouble for a half-measure. For I was beginning to lose all sense of measure, after all this wrestling and wrangling, and to say, All or nothing.

Like most of LeWitt's work, Variations of Incomplete Open Cubes provides one with an experience that is obsessional in kind. On the vast platform, too splayed to be taken in at a glance, the 122 neat little fragmented frames, all meticulously painted white, sit in regimented but meaningless lines, the demonstration of a kind of mad obstinacy. Quite unlike the diagrams in Euclid, where the axiomatic relationships are stated but once and the variety of possible applications left to the reader; or unlike the algebraic expression of the expansion
of a given series, where the formulaic is used precisely to foreclose the working out of every term in the series, LeWitt’s work insistently applies its generative principle in each of its possible cases. The experience of the work goes exactly counter to “the look of thought,” particularly if thought is understood as classical expressions of logic. For such expressions, whether diagramatic or symbolic, are precisely about the capacity to abbreviate, to adumbrate, to condense, to be able to imply an expansion with only the first two or three terms, to cover vast arithmetic spaces with a few ellipsis points, to use, in short, the notion of etcetera. The babble of a LeWitt serial expansion has nothing of the economy of the mathematician’s language. It has the loquaciousness of the speech of children or of the very old, in that its refusal to summarize, to use the single example that would imply the whole, is like those feverish accounts of events composed of a string of almost identical details, connected by “and.”
And while I gazed thus at my stones, revolving interminable martin-gales all equally defective, and crushing handfuls of sand, so that the sand ran through my fingers and fell back on the strand, yes, while thus I lulled my mind and part of my body, one day suddenly it dawned on the former, dimly, that I might perhaps achieve my purpose without increasing the number of my pockets, or reducing the number of my stones, but simply by sacrificing the principle of trim.

But it is not entirely like those examples. For garrulousness, babble, the spasmodic hiccup of repetitious detail, have about them a quality of randomness, disorganization, a lack of system. And LeWitt's outpouring of example, his piling up of instance, is riddled with system, shot through with order. There is, in *Variations of Incomplete Open Cubes*, as they say, a method in this madness. For what we find is the "system" of compulsion, of the obsessional's unwavering ritual, with its precision, its neatness, its finicky exactitude, covering over an abyss of irrationality. It is in that sense design without reason, design spinning out of control. The obsessional's solutions to problems strike us as mad, not because the solutions are wrong, but because in the setting of the problem itself there is a strange short-circuit in the lines of necessity.

Now I am willing to believe, indeed I firmly believe, that other solutions to this problem might have been found, and indeed may still be found, no less sound, but much more elegant, than the one I shall now describe, if I can. And I believe too that had I been a little more insistent, a little more resistant, I could have found them myself. But I was tired, but I was tired, and I contented myself ingloriously with the first solution that was a solution, to this problem.

LeWitt once explained, "If I do a wall drawing, I have to have the plan written on the wall or label because it aids the understanding of the idea. If I just had lines on the wall, no one would know that there are ten thousand lines within a certain space, so I have two kinds of form—the lines, and the explanation of the lines. Then there is the idea, which is always unstated." The lines are raw phenomena for which the label is not an explanation in the sense of a reason or an interpretation, but an explanation in the sense of a documentary narrative or commentary, like a guide's telling his listener how high this particular redwood is, or how many years it took the Colorado River to cut the Grand Canyon. The label is the document of persistence, of invention dancing over the pit of non-necessity. And then, as LeWitt was fond of saying, "there is the idea, which is always unstated."

Sometimes, however, LeWitt did state the "idea." For instance in 1969 he was to have an exhibition in Nova Scotia, and for this occasion he mailed the

directions for the work, along with the kind of articulation that never appears on
the wall-label: "A work that uses the idea of error, a work that uses the idea of
infinity; a work that is subversive, a work that is not original. . . ." 8 These "ideas"
exist on an entirely different order than that of the mathematical, the deductive,
the axiomatic. If one uses the "idea of error" to generate a work, one has done
something quite different from illustrating an order that is ideated or Ideal, the
order LeWitt's critics keep insisting on associating with his art.

But not to go over the heartbreaking stages through which I passed
before I came to it, here it is, in all its hideousness. All (all!) that was
necessary was to put for example, to begin with, six stones in the right
pocket of my greatcoat, or supply-pocket, five in the right pocket of my
trousers, and five in the left pocket of my trousers, that makes the lot,
twice five ten plus six sixteen, and none, for none remained, in the left
pocket of my greatcoat, which for the time being remained empty,
empty of stones that is, for its usual contents remained, as well as
occasional objects. For where do you think I had my vegetable knife,
my silver, my horn and the other things that I have not yet named,
perhaps shall never name.

LeWitt did indeed write about ideas and how he wished to relate them to his
work, when he declared that "the idea becomes a Machine that makes the art." 9 He
also seemed to be addressing himself to an order superior to the merely visual
when he used the word "conceptual" to characterize his work in two manifesto-
like pronouncements he published in the late 1960s. And once the term was put in
play, "conceptual art" was like a ball that the art-world immediately ran with,
driving deep into the territory of Idealism. No Pythagorean dream was too exalted
for this art not to be able to reflect it as visual metaphor, as diagramatic
manifestations of the Real.

But LeWitt's "ideas" are not generally to be found in that high place. The
kind of idea he inevitably uses is subversive, addressing itself to the purposelessness
of purpose, to the spinning gears of a machine disconnected from reason.
Robert Smithson spoke of this when he wrote, "LeWitt is concerned with
ennervating 'concepts' of paradox. Everything LeWitt thinks, writes, or has made
is inconsistent and contradictory. The 'original idea' of his art is lost in a mess of
drawings, figurings, and other ideas. Nothing is where it seems to be. His concepts
are prisons devoid of reason." 10 LeWitt spoke of it also when he wrote, "Irrational
thoughts should be followed absolutely and logically." 11 The consequence of
obeying this direction, and LeWitt's art does obey it, is to arrive at the opposite of

8. Ibid.
1968, 21.
Idealism. It is to achieve an absurd Nominalism—as we saw in Variations of Incomplete Open Cubes.

Good. Now I can begin to suck. Watch me closely. I take a stone from the right pocket of my greatcoat, suck it, stop sucking it, put it in the left pocket of my greatcoat, the empty one (of stones). I take a second stone from the right pocket of my greatcoat, suck it, put it in the left pocket of my greatcoat. And so on until the right pocket of my greatcoat is empty (apart from its usual and casual contents) and the six stones I have just sucked, one after the other, are all in the left pocket of my greatcoat.

The aesthetic manipulations of an absurdist nominalism are hardly new with LeWitt. They appear everywhere throughout the production of Minimalism, beginning in the very early '60s, and are of course to be found in the literature most venerated by that group of sculptors and painters: the literature of the nouveau roman and of Samuel Beckett. To speak of what LeWitt shares expressively with his generation is not to diminish his art; rather it is to help locate the real territory of its meaning.

It is an absurdist Nominalism, for instance, that flattens the narrator's voice in Jealousy, as we are told of a grove of bannana trees through the painstaking, persistent, sadistic description of its individual rows. The effect is of course to drive attention away from the grove of trees and back to the voice and its obsession to count.

Pausing then, and concentrating, so as not to make a balls of it, I transfer to the right pocket of my greatcoat, in which there are no stones left, the five stones in the right pocket of my trousers, which I replace by the five stones in the left pocket of my trousers, which I replace by the six stones in the left pocket of my greatcoat. At this stage then the left pocket of my greatcoat is again empty of stones, while the right pocket of my greatcoat is again supplied, and in the right way, that is to say with other stones than those I have just sucked. These other stones I then begin to suck, one after the other, and to transfer as I go along to the left pocket of my greatcoat, being absolutely certain, as far as one can be in an affair of this kind, that I am not sucking the same stones as a moment before, but others.

And the passage from Molloy about the sucking stones is one of many possible instances from Beckett in which the gears of rationcination proceed to spin in an extraordinary performance of "thinking," where it is clear that the object of this "thought" is entirely contained within the brilliance of the routine. It is like music-hall performers doing a spectacular turn, switching hats from one head to the other at lightning speed. No one thinks of the hat as an idea: it is
simply a pretext for a display of skill—as is the “problem” of the stones. It is the ironical presence of the false “problem” that gives to this outburst of skill its special emotional tenor, its sense of its own absolute detachment from a world of purpose and necessity, its sense of being suspended before the immense spectacle of the irrational.

For LeWitt’s generation a false and pious rationality was seen uniformly as the enemy of art. Judd spoke of his own kind of order as being “just one thing after another.” Morris and Smithson spoke of the joy of destruction. For this generation the mode of expression became the deadpan, the fixed stare, the uninflected repetitious speech. Or rather, the correlatives for these modes were invented in the object-world of sculpture. It was an extraordinary decade in which objects proliferated in a seemingly endless and obsessional chain, each one answering the other—a chain in which everything linked to everything else, but nothing was referential.

To get inside the systems of this work, whether LeWitt’s or Judd’s or Morris’s, is precisely to enter a world without a center, a world of substitutions and transpositions nowhere legitimated by the revelations of a transcendental subject. This is the strength of this work, its seriousness, and its claim to modernity. To give accounts of this kind of art that misconstrue its content, that entirely misplace the ground of its operations, is to invent a false justification of the work which traduces and betrays it. Aporia is a far more legitimate model for LeWitt’s art than Mind, if only because aporia is a dilemma rather than a thing.