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Liberating Structures: Non-Visual Systems in the Art of Sol LeWitt

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In the tumultuous decade of the 1960s, various artists, composers, authors, and film directors chose to base their works on predetermined systems as a means of avoiding convention, representation, and personal habit. They selected a set of rules that were strictly followed during the execution of the work. These system-based works seem particularly self-referential, yet the systemic generators were frequently imported from other fields: composer Pierre Boulez based “Structure Ia” for two pianos on a work of Paul Klee, Alain Robbe-Grillet based two movies on serial and aleatory structures encountered in contemporary music,¹ the writers associated with the Oulipo Group subjected their work to formal patterns from mathematics and chess, and Sol LeWitt investigated the liberating effects for art of architectural, musical, and narrative structures.

Why were so many artists at this especially turbulent moment in history interested in systems? I argue that the employment of systemic structures, which are inherently a-centric and non-hierarchical, not only provided an alternative to the more expressionist art from the immediate past—for visual artists this was abstract expressionism—but in a less obvious manner also reflected a rejection of the established order of society. I further propose that the adoption of systems from other mediums added an extra liberating dimension to the already liberating effect of the systemic as such, serving to prevent recession into a conventional usage of the medium.

The focus of this paper is the work of American visual artist Sol LeWitt, a suitable figure for the subject of this collection perhaps especially because of the interplay in his work of image and text, and his belief that ideas in themselves can be works of art, whether they be given visual, verbal, aural shape, or no form at all. His few but influential writings from the late 1960s, most notably “Paragraphs on Conceptual Art” and “Sentences on Conceptual Art,” are indeed best known for describing and promoting a kind of art that is based on ideas rather than on form. Since 1965, LeWitt has based his structures, wall drawings, and prints on a simple idea, such as “Variations of Incomplete Open Cubes” (1974). Before executing, or giving physical shape to the artwork, LeWitt would come up with a set of verbal instructions, or rules, that he himself or his assistants were to follow closely. Although the idea itself is often logical, the physical manifestation is generally perceptually illogical, and hard to analyze in the absence of a verbal description or schematic plan.² In order to conceive the system behind the haphazard appearance of the piece, the viewer has to become mentally engaged to find the key to the system, just as in detective stories—which LeWitt liked to read—the reader unravels the puzzle by actively analyzing and correlating the clues.³ I have chosen, however, to focus not on the idea—and language—orientedness of LeWitt’s art, nor on the delicate and dynamic encounter of idea, word, and image in his work, but to concentrate instead on the less thoroughly examined role of systems in the artist’s work of the 1960s and early ’70s.
LeWitt’s art almost without exception consists of a number of simple modules arranged in various configurations, the parameters of which correspond to a predetermined permutational system. The module itself is always extremely basic: a straight line, a square, a cube; even the colors and directions of the shapes are elementary: black, white, red, yellow, or blue, and horizontal, vertical, or diagonal. The artist has written: “The form itself is of very little importance; it becomes the grammar for the total work” (“Paragraphs,” par. 7). If the unit is too interesting in itself, the attention is detracted from the “idea,” the underlying system. LeWitt has referred to the system or idea as the “machine that makes the art” (“Paragraphs,” par. 1).4 The deployment of a system to take away from the artist the responsibility of making decisions ensured objectivity and precluded that “taste,” “whimsies” (“Paragraphs,” par. 5),5 and “unconsciously remembered forms” (“Serial Project”)6 would effect the outcome, even though, of course, the system itself had to be invented. In LeWitt’s words: “If the artist changes his mind midway through the execution of the piece he compromises the result and repeats past results” (“Sentences,” sentence 6).

As mentioned before, LeWitt was not alone in the exploration of systems. He saw “hints of system” in the work of fellow artists such as Frank Stella, Jasper Johns, Donald Judd, and Dan Flavin (Glueck 28). He seems to have placed more emphasis, however, on the significance for the development of his particular brand of systemic art of certain practices in other artistic domains, especially music, architecture, literature, and the precursor to film, motion photography. When discussing possible sources and parallels for LeWitt’s art, however, one should take into account the artist’s frequently expressed belief that artworks should proceed from ideas about art and “fall within the conventions of art” (“Sentences,” sentence 17).7 In an unpublished, undated interview conducted by Lucy Lippard around 1970, he has criticized artworks that illustrate non—artistic theories by “fashionable heroes” such as Marshall McLuhan and Claude Lévi—Strauss. On the other hand, he has acknowledged in a 1970 lecture at the Nova Scotia College of Art and Design that “the really good artists” have many interests outside the visual arts. It appears, then, that LeWitt did not disapprove of artists’ finding inspiration in disciplines outside the visual arts, as long as they continued to be concerned primarily with art. His own work was indeed, as noted, concerned with the rudimentary founding blocks of visual art: the line, the cube, primary colors. It also pertained to—and undermined—notions that for long had been considered intrinsic to art, such as originality and skill. Successful art not only falls within the conventions of art, it also “changes our understanding of the conventions by altering our perceptions” (“Sentences,” sentence 20). Practices in other disciplines might very well provide the stimulus for such alteration.

As we know from pictures included in his photographic Autobiography, LeWitt’s library was extensive and diverse. It included books on minimal music, architecture, politics, film, sports, and literature by authors like Robbe-Grillet, Nabokov, Borges, and Beckett. Many of the works of the latter writers have structures or concerns that are parallel to those of LeWitt, such as non-subjectivity, non-expressivity, self-reflexivity, an obsession with order, repetition, permutation, and structures that have no beginning and end. I will here, however, explore the correspondences that exist between LeWitt’s work and the disciplines that he himself periodically indicated as influential.

LeWitt has frequently discussed the work of photographer and scientist Eadweard Muybridge as one of the major influences on his art. From the 1880s onward
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Muybridge photographed the successive stages in particular movements of humans and animals. His 1887 book *Animal Locomotion* consisted of many series of photographs that each recorded a progressive instant of a single action captured by multiple cameras positioned at various angles. LeWitt was fascinated by Muybridge's sequential photographs in part because the individual pictures were never shown separately but always in series: in LeWitt's eyes their meaning lay not so much in the images as autonomous entities as in the relationship between them. Moreover, the logic and order of the photos' presentation was determined mostly in advance. In 1978 LeWitt said: “Muybridge used a serial system. His use of signs as language, as syntax, as narrative, was a starting point for my concern with finite systems […]” (Glueck 28). In a later interview he called Muybridge “an ideal kind of system artist,” who offered an alternative to formalist art (Garrels 47).

The systemic and repetitive aspect was not the only feature in Muybridge’s work that offered LeWitt an escape from the conventions of a more form-oriented art: its modern, narrative nature proved liberating as well. Narration for LeWitt offered a departure from formalism, for it used form not as an end but as a means (“LeWitt Interviewed” 124). A piece that according to the artist was directly inspired by the narrative structure of Muybridge’s photography was “Serial Project No. 1” (1966), which the artist has reckoned amongst his most important works. The following lines appear in the artist's description of the piece: “The premise governing this series is to place one form within another and include all major variations in two and three dimensions. This is to be done in the most succinct manner, using the fewest measurements. It would be a finite series using the square and cube as its syntax. The set contains nine pieces. They are all of the variations within the scope of the first premise” (“Serial Project”). As rendered in the schematic plan accompanying the work, the nine pieces within each of the four groups are ordered according to a preset series of permutations, the most prominent one being mirror transformation. LeWitt has likened the sequence, or narrative, of Muybridge’s running man to the serial transformation and narrative in his own piece of “a cube within a cube, a square within a square” and a cube within a square (“LeWitt Interviewed” 124). In both Muybridge’s arrangement of photographs and “Serial Project,” the structure is narrative, although the relation of the individual units to the macrostructure can be seen all at once (“Serial Project”). This simultaneity and the fact that all the parts, the individual photographs, received equal treatment in Muybridge’s presentation appealed to LeWitt’s sensitivities. It was this lack of hierarchy and linearity that made Muybridge’s work so modern, aside from the fact that it “led to the motion picture which was the great narrative idea of our time” (“LeWitt Interviewed” 124).

The use of predetermined systems as a means to rule out personal preference, expression, and conventional idioms had been explored most fervently in the field of music, especially in so-called integral serialism. Since the 1950s, composers such as Pierre Boulez, continuing the experiments of Arnold Schoenberg, invented non-linear, non-climactic mathematical systems that determined a major portion of the musical fabric. Because the creative act now took place at a new level, that of the choice of system, the composer lost control over the details and the execution of the composition. For his totally serial piano piece “Structure Ia,” for example, Boulez used a row of twelve notes to which he assigned the numbers 1 through 12. Based on this 12-tone series he created two matrices: the O-, or Original, matrix and the I, or Inversion-matrix, the
pitches in the first row of the inversion matrix being the mirror images in a horizontal axis of the twelve pitches in the original matrix. All the musical parameters—such as duration, pitch, dynamics, and attack mode—were determined by transpositions, inversions, and retrograde or reverse order readings of the original series of notes. All dynamical values, for example, were assigned a number, and the order in which they occurred was derived from the diagonals of the two matrices. This was the most predetermined composition Boulez ever wrote and, realizing that he had pushed the method of integral serialism to extreme limits he provisionally titled the work after a painting by Paul Klee: “At the limit of fertile ground” (1929). In some later pieces, Boulez relaxed the rigid structure of the serial idiom by building in a factor of chance, which allowed the performer to make certain decisions that the composer could never have predicted.10

The parallels with LeWitt’s systemic works like “Drawing Series I, II, III” (1968) are striking. The artist designed this piece, his first serial drawing, for a book project by Seth Siegelaub that was reproduced on a Xerox machine. On the plan of “Drawing Series I, II, III,” the artist assigned a number to each of the four basic line directions. The number 1 stands for a vertical line, the number two for a horizontal line, 3 for a diagonal left to right line, and 4 for a diagonal right to left line. The artist then submitted the numbers to a set of permutations, based on rotation, mirror, cross & reverse mirror, and cross reverse. He repeated all the original ninety-six variations from the upper row with superimposed lines in the lower row, which added up to a total of hundred and ninety-two variations distributed over twenty-four pages.11 The permutation system was again all-controlling and was followed to completion during the execution. Not long after the publication of the Xerox book, LeWitt transformed this piece into a wall drawing.

LeWitt’s wall drawings are usually not permanent and can be performed many times, in different locations by different people. Each time the work is realized, it looks different because, as the artist has said: “Each person draws a line differently and each person understands words differently.”12 The texture and dimensions of the chosen wall as well as the drawing habits of the draftsmen affect the result. In a parallel move to Boulez’s earlier inclusion of chance in serial composition, LeWitt around 1970 elaborated this necessary side effect of his wall drawing method—unpredictability—by inventing systems that were less deterministic, incorporating elements of randomness. “Wall drawing 65” (1971), for example, imposed both limits and freedom on the draftsmen. Its almost humorous instructions read: “Lines not short, not straight, crossing and touching, drawn at random using four colors, uniformly dispersed with maximum density, covering the entire surface of the walls.” The shape of each realization of “Wall Drawing 51” (1971) not only depends heavily on the interpretation of the performer, but perhaps even more on the characteristics of the wall. The instructions are minimal: “All architectural points connected by straight lines.”13

LeWitt was highly aware of the novelty within the visual arts of his wall drawings. The notion of a work that was based not only on a predetermined system but also on performativity and infinite repeatability was as common in the field of western music as the notion of a painting in the visual arts. Within the western tradition of visual art, however, the use of a finite, preset system that could be manifested endlessly in different configurations, as well as the concept of a work of art as a collaborative effort between artist and performer, were unprecedented and had far-reaching implications for
the notions of originality, authorship, and ownership, LeWitt has often used the analogy to both music and architecture when discussing both the different appearance of a single idea for a wall drawing in its various manifestations and the separation in his work between conception and execution. He has said: “The composer doesn’t play any instruments” (“Conversation with LeWitt” 47). “The architect doesn’t go off with a shovel and dig his foundation and lay every brick. He’s still an artist.” And of the wall drawings: “I think of them like a musical score that could be redone by any or some people” (“Excerpts 21-23”). “Every time you hear the same Bach piano or harpsichord thing it’s different [...]” “Whoever does it will leave their mark on it” (Interview 1974, 58). LeWitt has always been a music aficionado and has had a longstanding interest in architecture. He has acknowledged the influence of both his job in the architectural firm of I.M. Pei and his knowledge of music. The analogy to music, however, might be more complete since, as the artist has pointed out, architecture has a specific function while “art is not utilitarian” (“Paragraphs,” par. 14).

The response to my initial question as to why LeWitt and other artists of the 1960s generation were interested in systemic operations will always be incomplete. I propose, however, that LeWitt’s never-ceasing invention of novel systems and rules that are arbitrary, purposeless, and non-hierarchic reflects his political views. Before I elaborate on this statement it should be noted that the artist has repeatedly insisted that he does not believe that art has a social or moral purpose (“LeWitt Interviewed” 128). It is likely that, had he ever been attacked on the absence of politics in his work, he would have defended himself with an argument similar to the one he used in answer to an attack on the lack of sexual appeal of his art: in a letter to James Fitzsimmons, who had accused his work of sterility, he explained that a man who leads a healthy sex life uses not artworks but human beings for sexual gratification. Similarly, he might have argued that it is more commendable for an artist to lead a politically active life than to convey a directly political message through his art—a message that would most likely have little effect on the world anyway. In a particularly funny section of a 1969 interview with Patricia Norvell, the artist argues that his work has very little to do with the world:

I don’t think of art as being something particularly rational. For instance these methods are really pretty absurd. ... Like, to put three boxes together is a really silly kind of thing when you think of it. I mean, the world is really going to hell in a toboggan, and I’m putting these boxes together. It’s really silly. But, you know, that’s not the point. (“Sol LeWitt” 121)

In later years, however, LeWitt seems to have been more open to the idea that contemporary events might have affected the development of his work, although he continued to maintain that he never made art in order to change society (“Excerpts” 22).

In spite of the artist’s assertions, it is known that he was on the left side of the political scale, participated in a number of politically-inspired events, and discussed the social validity of art with his friends. He has emphasized that the idea underlying his works is the most important element of his art and argued that “ideas cannot be owned” (“Excerpts 22”). He devoted much of his time to the creation of books because they were affordable and could be owned by anyone (“LeWitt Interviewed” 128). He explained
during an interview in 1969 that he started to use systems in order to create “a kind of order where everything is equal, nothing is superior and nothing is inferior” (“Sol LeWitt” 119). He has commented that his first urge, as a high school student in the industrial town New Britain, Connecticut, to be an artist was “a rejection of bourgeois values in my whole upbringing and society” (Glueck 25; Interview 1974, 5-6), and noted that it was precisely during the sixties, a decade of great social turmoil and political protest, that a large number of artists were “interested in reinventing art; starting from square one; getting rid of all the previous art ideas” (“Conversation with LeWitt” 48).

In view of all these facts, I suggest that the artist’s fervent reinvention of the rules, his commitment to non-conventional methods, his endeavor to make art more widely accessible, his attraction to non-hierarchic structures, and his attempt to encourage the viewer to actively and consciously identify an all-determinant yet artificial underlying system were all related to a widespread ideological hope amongst young, progressive artists that the established system could be overthrown by a new, more fair, decentralized system that instead of disguising its order as natural and absolute would inspire people to distinguish and, if necessary, renew its rules and organization. Perhaps the somewhat absurd deployment of a purposeless, arbitrarily designed system to eliminate the control of the one in authority, the artist, to a certain extent ridiculed the morally questionable role that goal-oriented systems played in the “more serious” world of government, business, and military. Artists like LeWitt proposed an alternative application of systems—systems that were not dogmatic and oppressive but provisional, playful, and liberating.

Notes

1 Reference to the aleatory structure of Robbe-Grillet’s N Took the Dice (1971), and to the same director’s film Eden and After (1971), which was based in part on Arnold Schoenberg’s atonal music.

2 A few decades later, the artist described this problematic as follows: “The price that you have to pay for following this logical system is that the more complex and absurd the result became perceptually, you would get a forest of trees where it might be almost impossible to discern the original idea. I was very involved in writers like Samuel Beckett who were also interested in the idea of absurdity as a way out of intellectuality. Even a simple idea taken to a logical end can become chaos.”

3 In a 1978 interview LeWitt explained: “A lot of the things I do are trying to make order out of chaos. [...] I start with an idea and work it out. The viewer sees it from the outside and works it in. I like reading detective stories—they’re all about getting to the crux of things, starting from the outside and getting to the inside. I give the viewer all the clues and he arrives at the idea.” (Glueck 28).

4 During an interview conducted in 1969 the artist said, in a similar vein: “I think that basically what my art is about is not making choices. It’s in making an initial choice of, say, a system, and letting the system do the work.” (Norvell 114)

5 The complete sentence reads: “If the artist wishes to explore his idea thoroughly, then arbitrary or chance decisions would be kept to a minimum, while caprice, taste and other whimsies would be eliminated from the making of art.” See “Paragraphs,” par. 5.
“One would follow one’s predetermined premise to its conclusion, avoiding subjectivity. Chance, taste, or unconsciously remembered forms would play no part in the outcome.” See “Serial Project.”

Sentence 17 in full: “All ideas are art if they are concerned with art and fall within the conventions of art.”

In the early 1980s, LeWitt wrote: “[Muybridge] offered a way of creating art that did not rely on the whim of the moment but on consistently thought out processes that gave results that were interesting and exciting.” See “Excerpts 24.”

In the same interview, LeWitt defined “the idea of seriality” in the following words: “the idea that all of the parts were only the result of the basic idea, but that each individual part was equally important, and that all parts were equal—nothing hierarchical.”

For an in-depth analysis of Boulez’s Structures, see Antokoletz, ch. 15: “Total Serialization in Europe.” LeWitt has mentioned on several occasions that in the early 1960s he read an article on serial structures in both Stéphane Mallarmé’s poetry and serial music of the 1950s, particularly Pierre Boulez and Karlheinz Stockhausen (Zeller).

For a description of the work by the artist himself, see Legg 88.


“Wall drawing 65” was first installed at the Solomon R. Guggenheim Museum, New York, 1971. “Wall drawing 51” was first installed at the Sperone Gallery and at the Museo di Turino, Turin, Italy.

LeWitt’s circle of friends in the early 1960s consisted, amongst other people, of Lucy Lippard, Robert Mangold, Robert Ryman, Michael Kirby, Dan Flavin, Tom Doyle, and Eva Hesse.

Works Cited


Mette Gieskes


Selected Proceedings from
the UCLA Department of French and
Francophone Studies
Annual Graduate Student Conference

CAMERA OU STYLO:
A PROBLEMATIC DIALOGUE?

Paroles Gelées
UCLA French Studies

Volume 21
Spring 2004
Ce serait le moment de philosopher et de rechercher si, par hasard, se trouvait ici l'endroit où de telles paroles dégèlent.

Rabelais, *Le Quart Livre*.

*Paroles Gelées*
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