BARRY LE VA

FOUR CONSECUTIVE INSTALLATIONS
&
DRAWINGS 1967–1978

THE NEW MUSEUM

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PREFACE AND ACKNOWLEDGEMENTS

This is the first comprehensive solo museum exhibition of Barry Le Va's work in America. His work has not been widely seen nor written about and remains very much of an enigma even to those who have been supporters of it. This is in part, I believe, because it is difficult to accurately place the work in the context of very recent art history, and because it is related more closely to ideas and questions recently raised in other fields, particularly those of psychology, physics, and architectural theory. In part it is because Le Va has lived and worked in relative isolation from other artists and the art community in general.

While the formal aspects of his work—its simplicity, elegance, mystery and intelligence—have been admired by his peers and public alike, it is in the realm of ideas that the work has made its greatest contribution. That contribution is the most difficult to judge from the art-world perspective, and is also the source of much confusion and ignorance about the meaning—and the intention—of the work.

The present exhibition consists of four consecutive installations and a large body of drawings from about 1967–1978. The installations are to be decided upon just prior to the exhibition. They will cover approximately a twelve-year time span, and are works that have never before been executed. It is our hope that the installations and drawings will help to situate his work in a larger context as well as permit pieces which have never been seen before to be viewed by a larger public than would otherwise be possible. Le Va's work was once described by a teacher and friend of his as "a model for dialog;" this spirit is very much in keeping with the aims of The New Museum as a forum for discussion, controversy, and elucidation.

Without the help of many people, the exhibition would not have been possible: Lacy Davisson compiled the biography and bibliography with remarkable speed and precision; Terry Rooney organized the catalog material, researched titles, provided checklists, proofread, and in every way was an invaluable asset; Bonnie Johnson typed the catalog essay and written material with patience and care; Tim Yohn once again provided intelligent, critical and invaluable editing; Joan Greenfield, our designer, worked efficiently and good naturedly under the considerable pressures of time.

The Sonnabend Gallery was good enough to offer assistance of every kind. Their generosity, time and thoughtfulness made the exhibition immeasurably easier. I am especially grateful to Joyce Nereaux, Gallery Director, and to Gail Swerling and Nick Scheidy for their help.

Thanks also to Fredericka Hunter and Ian Glenning of The Texas Gallery, Houston, for their invaluable assistance. Dan Weinberg of the Weinberg Gallery, San Francisco, was helpful in supplying necessary documentation, as was Claire Copley in New York.

Thanks to the lenders who were willing to part with valued drawings; to Martica Sawin, Director of the gallery at the Parsons School of Design, for providing additional exhibition space to help make this show as comprehensive as possible; to Max Munn of APF Framing, for his generous assistance in framing the exhibition's many drawings; to the overworked but enthusiastic staff and interns at The New Museum, who once more utilized their considerable skills toward the successful completion of the show.

Above all, thanks to Barry Le Va, for sharing with me his time, his energy, his work, his ideas and his good humor throughout the difficult months of preparation.

M.T.

BARRY LE VA: WORK FROM 1966–1978

Marcia Tucker

Skillful non-verbal communication is essentially subversive.

—Albarn and Smith
Diagram, The Instrument of Thought

I

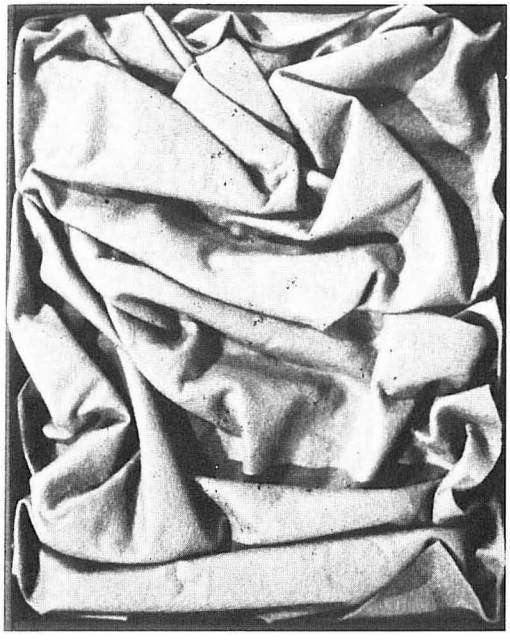
Barry Le Va's work is spare, straightforward, visually refined, logically ordered, systematically elusive, physically challenging and intellectually enigmatic. Since the mid 1960s, when as a student Le Va moved away from making discrete objects to creating pieces which were the result of a specific activity on his part, his work has become increasingly complex and resistant to interpretation. Paradoxically, the elements he uses have become simpler and more direct.

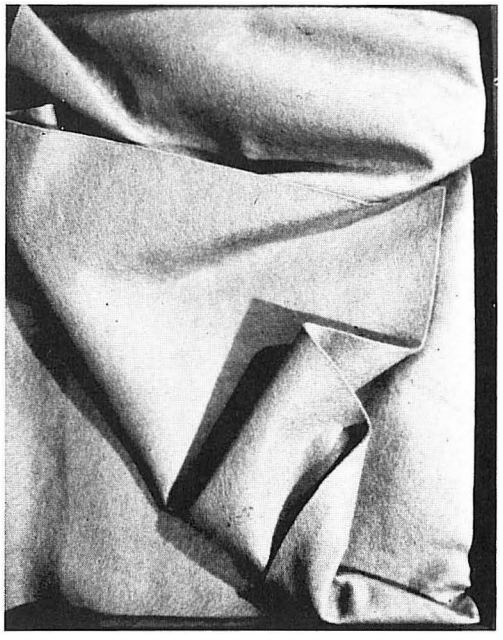
Born in Los Angeles, Le Va first became known outside of a small circle of associates and fellow artists when a piece, made of felt particles randomly scattered over a large expanse of yellow wooden floor, was reproduced on the cover of *ArtForum* magazine in November, 1968.[1] The work was immediately controversial; in fact, it appeared so radical in the context of the then prevalent minimalist sensibility that its appearance was considered by some to be an irreverent act of provocation on the part of the magazine's editors. His isolation from all but a few artists led him to leave the West Coast with the intention of eventually coming to New York. Two interim years passed in Minnesota, teaching at the Minneapolis College of Art and Design, before he was able to move to New York City in 1970, where he has resided since. In this period of time, Le Va has made a body of work which is remarkable for its breadth, its adventurousness, and its relentless pursuit of a unique vocabulary based on ideas, events, a "principle of vision,"[2] and an active involvement with the viewer rather than with the creation of objects.

Le Va's early work, after he gave up painting in 1965, consisted of three-dimensional constructions. He says that these pieces were "almost like giant cartoons, abstracted, and involved with the notion of chance imagery." Le Va was interested in comics because he felt that "there was a certain kind of drawing that was more interesting than what I was getting at school. Comics were subversive and I was toying with the idea that 'low art' could be considered 'high' art." Like the *Hairy Who*, a group of artists living in Chicago at that time, Le Va was thinking about the basic nature and definition of drawing; he felt that by abstracting the images in the comics, charting lines of force rather than depicting people or objects, one could convey a verb, activity or situation. Pursuing these ideas, around 1965 he made a bright yellow construction, consisting of a wall with a big jagged hole in it, a literally negative space, the positive section of which lay on the floor still attached to the wall. The implication of an action, that someone or something had broken through the wall, was what interested him. He felt that the content of his work did not lie in the images he made, but rather consisted of "instances, causes, results in time."

Similarly, Le Va describes the drawings of this period as "abstracted household objects, concerned with the specific functions of an action, and resulting in movement around a page." He was interested in "chance imagery," the kind of work being done by the Swedish painter Oyvind Fahlstrom, in the 1960s. Fahlstrom's comic book-like images were arranged on a flat picture bed and attached by magnets, so that their configuration could be changed at will. Consequently, the way the images were arranged would radically alter their content, an idea that Le Va was investigating in his own drawings, "like playing with symbols."

The questions Le Va asked himself at that time concerned basic sculptural issues: "How could one make, for instance, a sculpture that was not architecturally dependent upon three-dimensional space? How could one make a single related piece that would take up a whole space, but without using many different objects? How could elements be located in space without being minimal, without arbitrarily composing them? How could one deal with what sculpture does to the physical body of the





Felt: Placed, Folded and Compressed, 1966–1967
Grey felt
11 × 14" each (series of 10 trays)
Collection of Larry Urrutia, La Jolla, California

viewer, without making an object?"

Looking at the studio and the physical residue of the constructions he had been building in 1966, Le Va began to realize that there existed already, in the studio, isolated areas of activity that did not need to be finished, which were held together by time, activity (the building of a piece) and location. Scraps and remnants of material alone could constitute the piece. However, the notion of an end result still existed: if one laid out the elements in space as though, for example, a chair were going to be built, the chair would be implied even if it were never actually made. The mere implication of a finished product would hold the work together, he felt. Then he realized that even this implication was unnecessary, that the idea itself of an object could be dispensed with. Thus, seeking "a set of elements that would locate themselves within a space, and imply the result of an activity, change, motion, a state of flux and an isolated period of time that would have no foreseen end," Le Va began the felt pieces which occupied him from about 1966 to 1968.

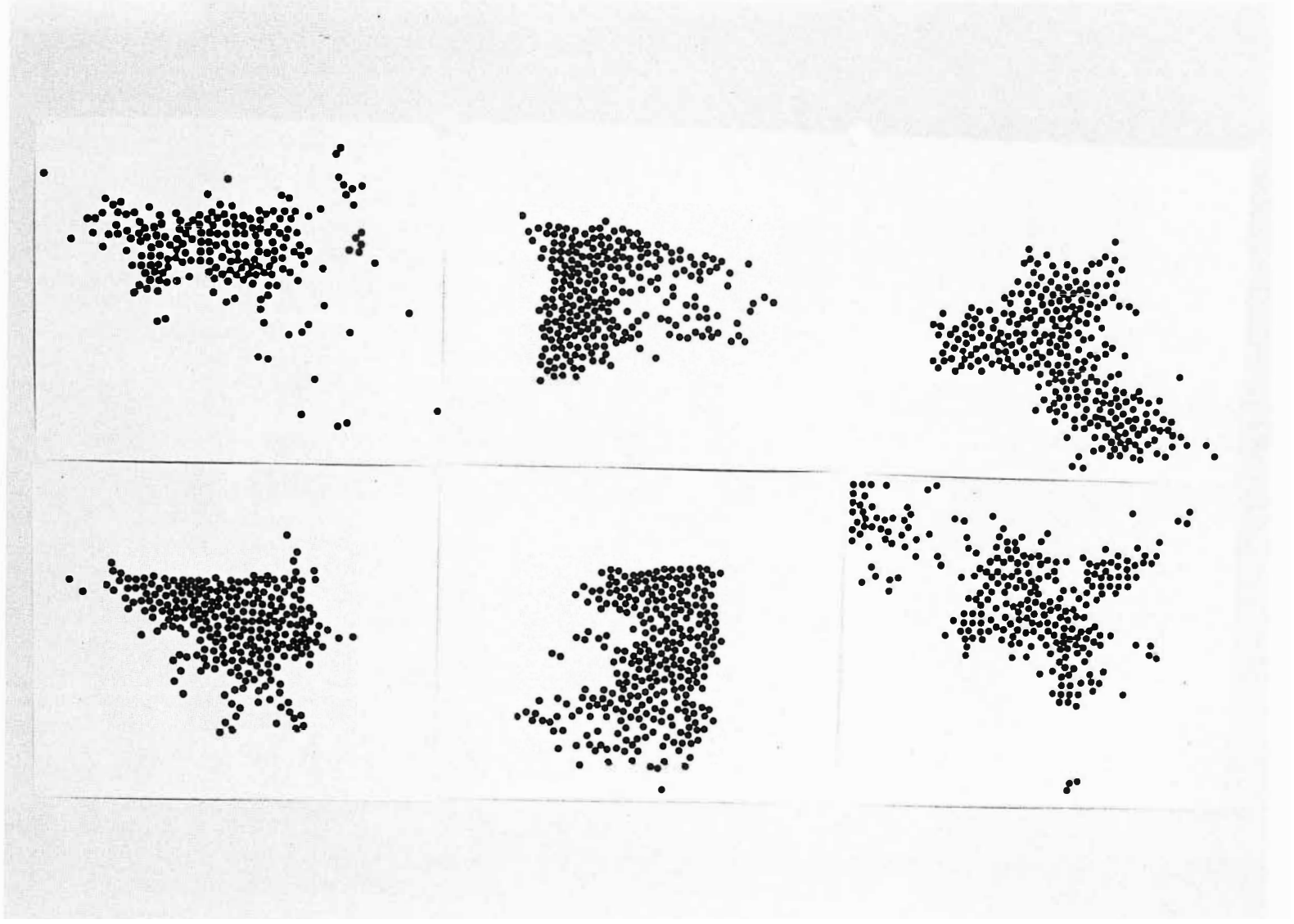
His use of felt, which was cheaper than canvas and did not unravel, was at the suggestion of a classmate, but because of the informality and impermanence of the material, he became interested in the moral and ethical implications of such work. While enthusiastic about its non-commercial aspects—questions of ownership and permanence arose for the first time then—he was disturbed by the idea of art as an extension of crafts, a problem posed by the use of felt as a non-traditional sculptural medium.

Nonetheless, the felt was a step away from making objects, because it had so little substance. A 1966 group of ten folded gray felt pieces, placed in shallow boxes, was done at the same time as some colored felt works consisting of both large and small pieces in red, yellow and blue. Primary or complementary colors were chosen at random from a color wheel. The only control which Le Va could exercise over this material was in positioning it. These pieces, mostly measuring 8′ x 8′, were arrayed on the studio floor, raising questions about the nature of the viewer's behavior as he or she walked through and around the piece.

Such questions about the nature of the "audience" have been integral to Le Va's work throughout, because he is interested in transition, instability, fluctuation, and change, in the interdependence of objective events with the subjective states of the observer.[3]

While the vivid color and ephemeral nature of these early works caused them to be seen in relation to painting problems,[4] the works addressed themselves, in Le Va's mind, to such questions as: "When does it cease to be a work of art? When is the work physically participatory or just mentally participatory? Is it the same piece if it is redone? Is it theater or not? Is it an arena of activity in which only a residue is left? Does the residue, whether physical or men-

Bearings Rolled (six specific instants; no particular order), 1966–1967
Ink on paper
Each sheet 14 × 17″



tal, constitute a clue? What is the nature of a visual clue?"

While Le Va was concerned with these notions, he was engaged in further disintegrating the component parts of the felt pieces, and increasing their size. These 1967 pieces, which often occupied extremely large spaces, had a wide variety of component sizes and shapes, and included ball bearings. The pieces were randomly scattered and gave the impression of an unstable, constantly shifting and fluctuating body of material. The pieces were clearly the result of an activity, the room itself constituting the arena for that activity, while the felt residues marked a sequence of events or a series of processes as they occurred in time. These "event sequences," in which the viewer's understanding of the piece depends upon an ability to engage in synchronic thinking, required the intuition of cause and effect in the work.

Because it became clear from the fact that certain felt particles were positioned on top of one another, consequently had been placed *after* other parts, the issue of temporality entered Le Va's work in a complex and abstract way. Time was seen by him as an unfolding rather than a linear process. Notions of "waiting" and "in use" came into play in the felt pieces, since the elements that were laid out had a sense of existing both prior to and after "use" in the traditional sense of object-making.

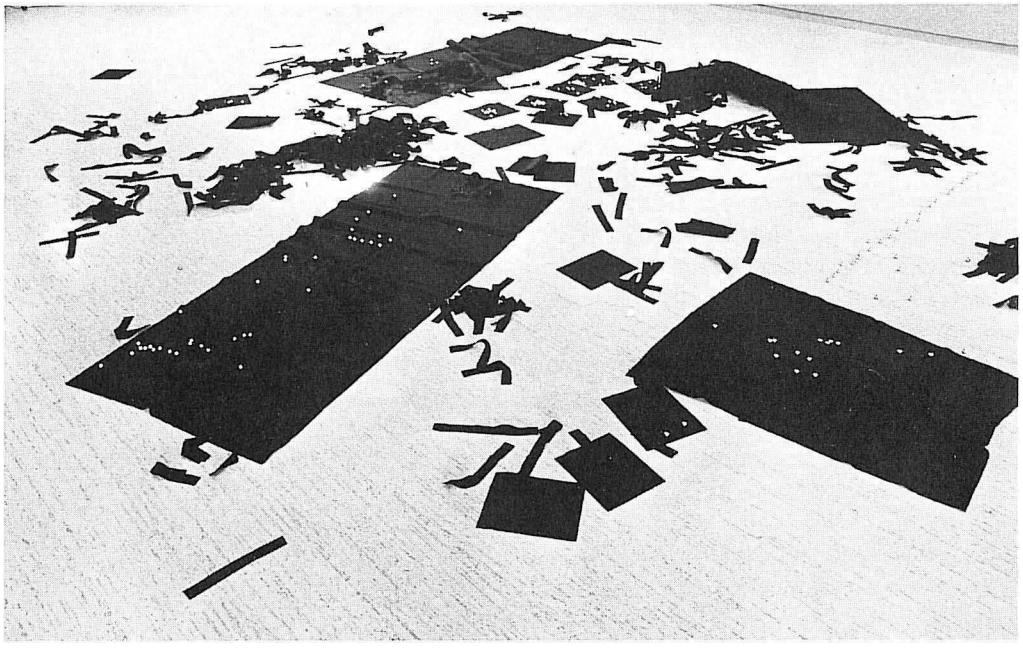
Here was an implication of an absolute and infinite continuation, resulting from Le Va's asking himself, "How can one construct transition?" His answer was, "By not making *anything*." He was not, he says, involved with a new notion of ordering, but rather with a different idea of content, with an attempt to make art that had to be understood by some other language than the language of art. "The only content value of art," he says, "was in its questioning." He attempted to eliminate esthetic, compositional or art historical references altogether. He wanted his work to be understandable or accessible regardless of cultural differences or training, and based his installations on what he called "a principle of vision" which would bypass art language or any language barrier at all. He has succeeded insofar as, his work is often thought of as completely non-visual. This is true to the extent that, as he himself has pointed out, "content can't be seen." However, there is a deeply affecting aspect to the work which is, in one sense, psychological, since a psychological response is one in which "the viewer brings to the percept . . . . information which is not physically available in the contemporary stimulus."[5] That his work, especially in recent years, seems less accessible is due, he feels, to the fact that "it's still difficult for people to understand the processes they use every day."

In other words, the processes integral to looking at Le Va's work are not ones ordinarily isolated and recognized when looking specifically at works of art. In the felt pieces, for instance, what presented itself as a reversible figure-ground relationship, a familiar concern of painting, was actually the straightforward consequence of a physical activity. The negative spaces, where the floor showed through under the felt particles, were the locations where the activity took place *from*, a nexus from which energy was directed. The facet of the visual and physical process of understanding that Le Va was concerned with eliciting in the viewer, even in these early works, was not one that is always utilized, but rather one that is isolated and applied in a unique way to each piece. Thus, "scanning," or having the eye move rapidly over a heterogeneous and discontinuous field so as to create a *gestalt*, or overall pattern, was of no interest to him, since the eye automatically scans in order to see.[6] Instead, clues to duration, force, momentum, and placement were provided in the piece, and the viewer was compelled—if the work was to be viewed accurately, according to the artist's intention—to reconstruct a sequence of events through the residual materials that were its result, to re-create the original cause of the configuration, and thus to re-create reality, as it were.

A good example of this kind of audience manipulation is found in *Velocity: Impact Run*, done at Ohio State University in Columbus (1969), when Le Va expanded his concerns with time and location. In it, he played with the effects of stereo sound in a specific space, addressing the piece to

Untitled #10, 1967
Ball bearings, black felt
Approximately 30 × 30″
Lytton Center of Visual Art, Los Angeles, California

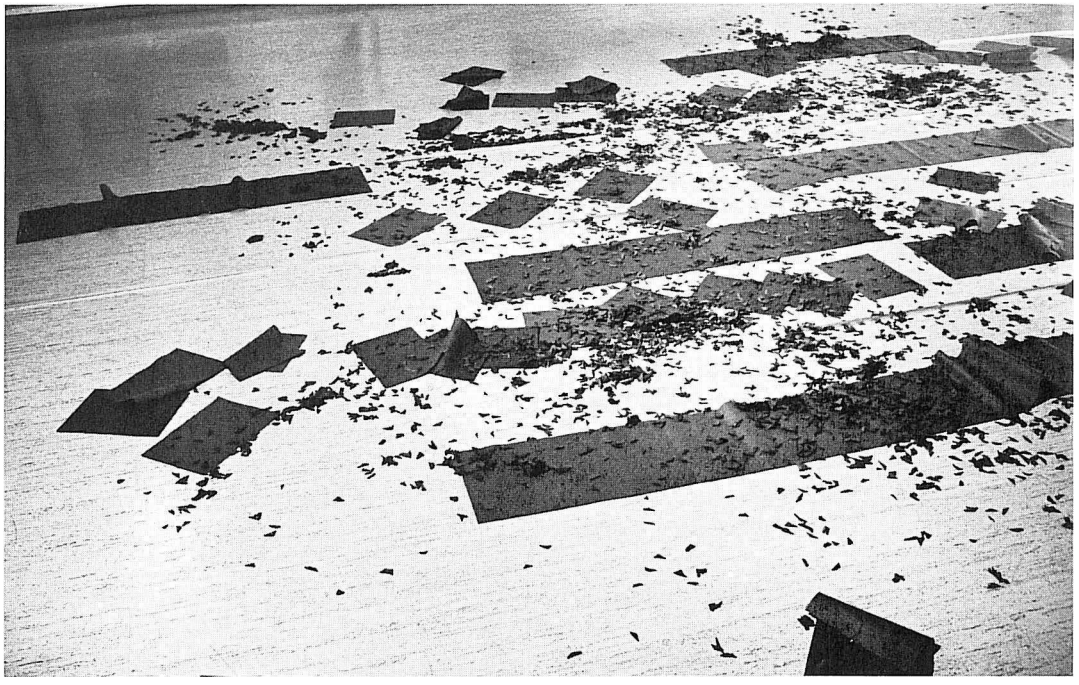
#13 (detail), 1967
Aluminum, grey felt
35 × 70″



"foot traffic," that is, the usual flow of students through a heavily trafficked area. Preparing for the piece, Le Va ran for an hour and a half up and down the length of the space, hurling himself into the opposite walls of the gallery until he stopped from exhaustion. The piece itself consisted of a stereo tape made of this activity, which was replayed in the space where the activity had originally taken place. "I wanted," he said, "to see if you could actually visualize a location through a sound." The students listened to the piece and *watched* it, turning their heads as they followed the direction of the sound, even though there was nothing to actually *see*. "It was a performance without me there," he notes. "They were literally watching a performance without a performer." The audience takes the place of the artist by experiencing the residue (a sound track) of the original activity, just as in the more recent pieces the viewer takes the place of the artist by reconstructing the original vantage point and the series of activities undertaken by the artist that led to the configurations on wall and floors.

Between 1967 and 1968, Le Va did an unusual series of drawings, called *Slow Death Zones*, one of which was shown at Galerie Ricke, in Cologne, Germany, in 1970. These were plans for a number of tapering pits, approximately three feet wide by one hundred feet deep, to be installed

4 Sections; placed parallel, 1967
Aluminum, grey felt
30 × 65'



in areas such as a hallway or office corridor where everyday activities occurred, or outside a doorway through which people passed on foot. The pits, tapering inward at the bottom, would be impossible to escape once fallen into. What interested Le Va was the fact that people would be forced into a completely different awareness of their surroundings in the vicinity of such a pit, because it would be unmarked, and extreme caution would be required where ordinarily none is needed. Such radical readjustment of thinking is very much related to Le Va's concerns in general: *Slow Death Zones*, like so many other pieces, forces the mental participation of the viewer by means of a physical situation which the artist creates.

Between 1969 and 1971, working with outdoor and photographic situations, Le Va explored such concerns as scale, vantage point, location, position, and activity, without making objects to be viewed. Also done at this time was *Landscape View* (1970), consisting of three stepped concrete slab platforms, 4' x 4' x 15", positioned 1,000 feet apart to form an equilateral triangle. The scale of a person standing on one of the steps would be ambiguous because of the distance and the angle at which the steps were situated. Their function would be equally ambiguous.[7]

Some photographic works of this period, no longer considered by Le Va as central to his ultimate concerns, isolated certain kinds of missing information, such as a specific height, location or distance. *Forest Run* was a series of photographs of a figure running from a long distance away into a forest, breaking into the forest edge, then situated inside the forest where the scale changes drastically. "When you're inside a container and you can't see its boundaries, you don't know its size anymore."[8] Similarly, in *Surface Crawl*, a subject was photographed crawling over, through, and under three different surfaces (grass, brush, water). In thus "objectifying" nature, Le Va's concern was to "take an exterior situation that one doesn't normally think of as a contained shape or mass, and to create an awareness of its constituent elements—volumes, edges, height, length, width—by means of a specific act which I would photograph from varying distances."[9]

The landscape works were an attempt to move as far away from the making of objects as possible. "I wanted," he said, "to get rid of any lingering object orientation by emphasizing horizontal scale. Formwise,

to have no visible structure, no unification, no pattern—not to accentuate form at all."[10]

Although these works remain problematic (that is, "non-esthetic") for Le Va, they indicate the extent of his concern with expanding vision beyond its usual limits, psychological as well as physiological, a concern which has become most clearly evident in works of the past three years. Now, as in the past, Le Va uses the word "notion" in discussing his work. For instance, he might discuss the "notion" of a location based on an activity, the "notion" of an event sequence, the "notion" of projected vision. Because a notion is, in effect, an internal model,[11] it is this rather than an object—or even a visual environment—that constitutes the meaning of his work.

Problems of time and space at the heart of Le Va's work account for his lack of interest in making objects, for the experience of a time-space continuum cannot be contained in a three-dimensional physical object, but it can be grasped through the instrument of diagram, which functions to convey multi-dimensionality. Le Va's career-long obsession with "clues" indicates that the absence of what is seen is more important to him than its presence. A residue of activities and events, the expenditure of various kinds of energy, constitutes the bulk of his work. Closer in spirit to physics and psychology than to most other art, his concerns place his work at the very edge of even a contemporary definition of sculpture. Nevertheless, the work does not exist in the realm of ideas alone, because it is the causal foundations that allow us to arrive at the irrational aspects of the work, those poetic and magical qualities which belong to the realm of vision rather than science.

Many of Le Va's concerns were shared with other sculptors in the past decade; an emphasis on horizontality, for instance, was in part an attempt to deal with such basic aspects of the physical world as gravity, which acts upon sculpture in a specific and decisive way. Reacting to the anthropomorphic, vertical sculptures of the 1950's and 1960's, Carl Andre, Richard Serra, Robert Morris and Eva Hesse, among others, were experimenting with gravity on sculptural materials, making pieces that were potentially dangerous because they could fall, or pieces which had *only* a horizontal dimension.

Le Va, however, was not interested in gravity, when in 1968 he began to use powdered substances to cover a large sur-

face without having any perceptible vertical dimension at all. Unlike the felt pieces, they could not be walked through without destroying them; the extent to which they could be disarranged and still be the work of the artist—or still be considered art at all—was no longer an issue. Rather, the pieces were concerned with another kind of ambivalence, or shifting relationship:

> Basically all the pieces made with fine dust became barriers. They had a kind of ambivalence about them: on the one hand they seemed to invite you to walk across them, because they were spread over an area where you would normally walk, yet at the same time they denied you that right because they were so fragile, they would disintegrate the moment you stepped on them.[12]

The first piece Le Va showed in New York (*Anti-Illusion: Procedures/Materials*, Whitney Museum of American Art, 1969)[13] consisted of a fine layer of flour in an irregular shape. Because it was situated in a large space with other art (a circumstance Le Va finds destructive to the intent of his work, since it must operate singularly within an environment to be understood at all), its scale shifted constantly. At times, the entire area seemed to float above the floor; other times it seemed to dwarf objects around it or to be dwarfed by them. The use of materials without substance was calculated by Le Va to reduce involvement with materials in general, but the chalk/powder/flour works became too visually seductive for his purposes, diverting attention away from what he considered the basic issues.

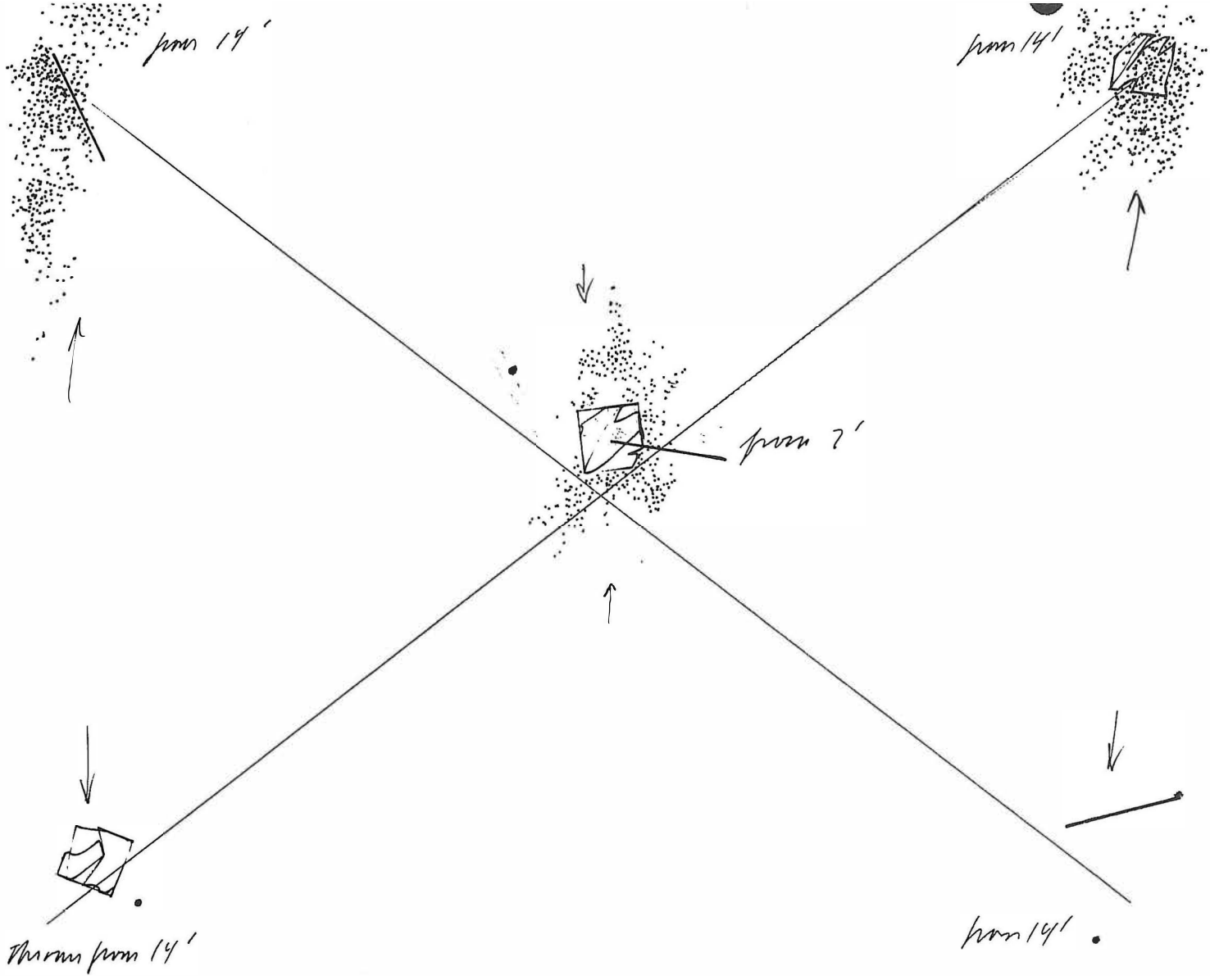
Whereas in the felt works the only control the artist had was in the positioning—and even this was subject to change by the unintentional activities of the viewers— the chalk or powder pieces were subject to almost no control at all. They worked, ideally, when they were very large, since the fluctuation of scale was disorienting and could be pushed by Le Va to explore further the mental participation of the viewer. Physically, some of the chalk pieces, especially the one shown at Nigel Greenwood Gallery in London in 1971,[14] made the viewer feel as though he or she were standing on a tilted plane. This was because the blown chalk lines emanated, conceptually, from a vantage point outside the space in which they were actually situated. To understand the configuration, the viewer had to mentally reconstruct the origin or axis of the lines; the space was no longer a container for the entire visual residue, but only a space in which *part* of the activity's residue could be seen.

The Greenwood piece therefore implied a location and a time outside itself. In the most immediate sense, even its visual presence changed, located as it was in a skylit space where every change of natural light drastically affected the appearance of the chalk drifts. What is seen is in a constant state of transition; what is understood is in a similar state of transition because it cannot be grasped, only imagined or projected in the mind, since the transitory and ephemeral materials have little material substance or value.

At first Le Va considered the blown pieces an attempt to obliterate their own process, while still retaining signs of that process. Because the lines were laid down and blown laterally, they existed, in a sense, in three places at once—the place they originated, the place they were blown to, and the place in between. Because of the drift, they could be seen as an infinite number of stages in a single process, or as a temporal continuum. The viewer, in addition to being thrown off balance while looking down at the lines, apprehended their emanation from some point outside the space; standing at a point where the lines clearly diverged to left and right, but at an odd angle, caused the viewer to feel that as the piece expanded, the activity it took to construct it was being limited, an activity Le Va likens to painting oneself into a corner.

Between 1967 and 1969, while working on the powder pieces and the felt distributions, Le Va also began to use combinations of materials in different states. These very large pieces (most of them executed in the studio) utilized paper, chalk, mineral oil and various powdered oxides in different states of saturation (wet, damp and dry). A two-part installation at the Minneapolis Institute of Art in 1969 consisted of layers of chalk, mineral oil and soaked towels which caused a chemical reaction in time; the second part

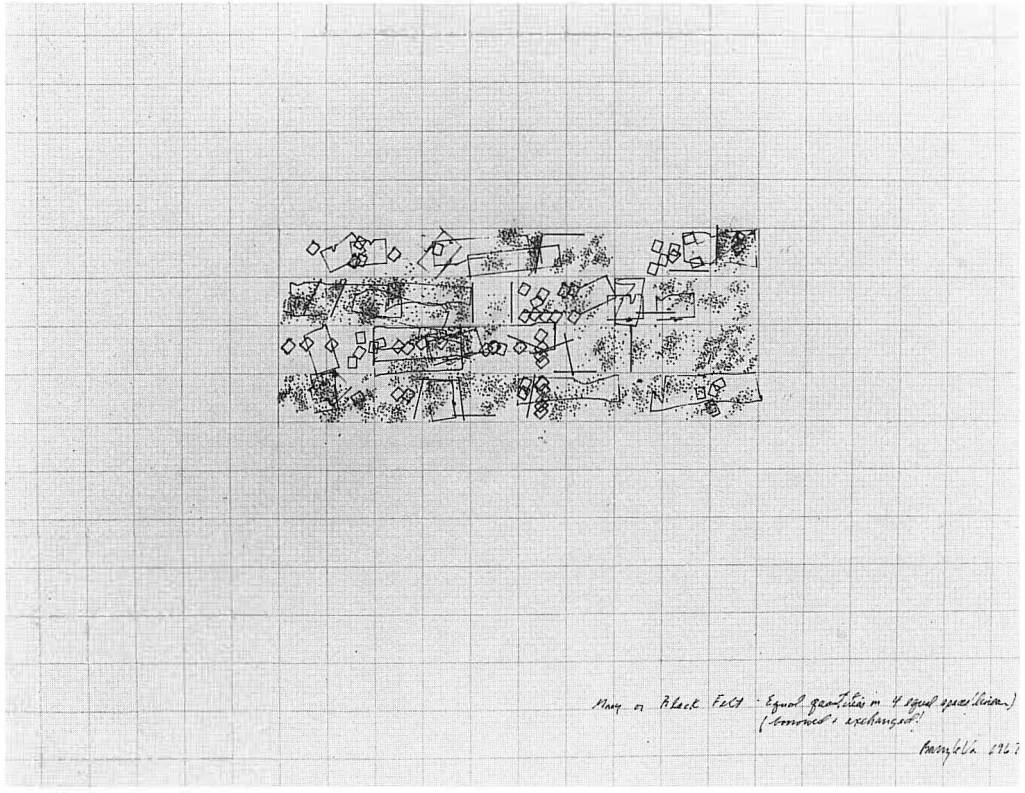
Possibly the Simultaneity of Events: an attempt #1, 1967
Ink on paper
8½ × 11"



Two Continuous and Related Activities: Discontinued by the Act of Placing, 1967

Ball bearings, felt, wood
Dimensions variable

Diagram for: Equal Quantities in 4 Equal Spaces/Linear (borrowed, exchanged), 1967
Ink on paper
17½ × 22"



Roger Gass

was similar to the *Anti-Illusion* piece, a triangular sifted chalk configuration in a square room. This work also resembled the blown lines installed in London in that the triangular area was formed as part of a rectangle which entered the room on a tilted axis, the rest of the square lying outside the room, therefore outside the viewer's immediate perception of it. As these kinds of geometrical configurations began to imply that they were part of a larger square, circle or other shape, a new concern became clear: if only part of the configuration could be seen, then the viewer should be able to reconstruct the whole which existed outside the immediate field of vision.

Another installation, done at the Walker Art Center in Minneapolis in 1969, just before the building was scheduled for demolition, consisted of three rooms, only one of which was completed. Each room contained different quantities of the same three substances—mineral oil, red iron oxide, and plate glass. The chemical interaction of the materials and the duration of the various stages (wet, damp, and dry) depended upon the proportions of the materials used. Because the substances dissolved and ran into each other, eventually to dry, crack and stain, the temporal aspect of the work was a direct result of its physical aspect. Each of the three rooms contained events in the process of transition from one state to another.

Here, since cause and effect had to do with the chemical nature of the materials themselves, once again Le Va elected to find situations in which his own control over the materials would be minimal. These pieces, which had an almost violent aspect because the materials were so far removed from traditional ones and so haphazardly arranged, led to two interesting works done in 1971.

One of them, *Cleaved Wall* (first done in the studio in 1969) consisted of a line of cleavers imbedded low on a wall of the Whitney Museum, and was for Le Va an extension of the hand. The cleavers were positioned by throwing them from a bent over, upside down position, so that the

By Four/Equal Quantities (within four equal spaces): arranged; rearranged borrowed; exchanged
1967
Aluminum, ball bearings, felt
Dimensions variable

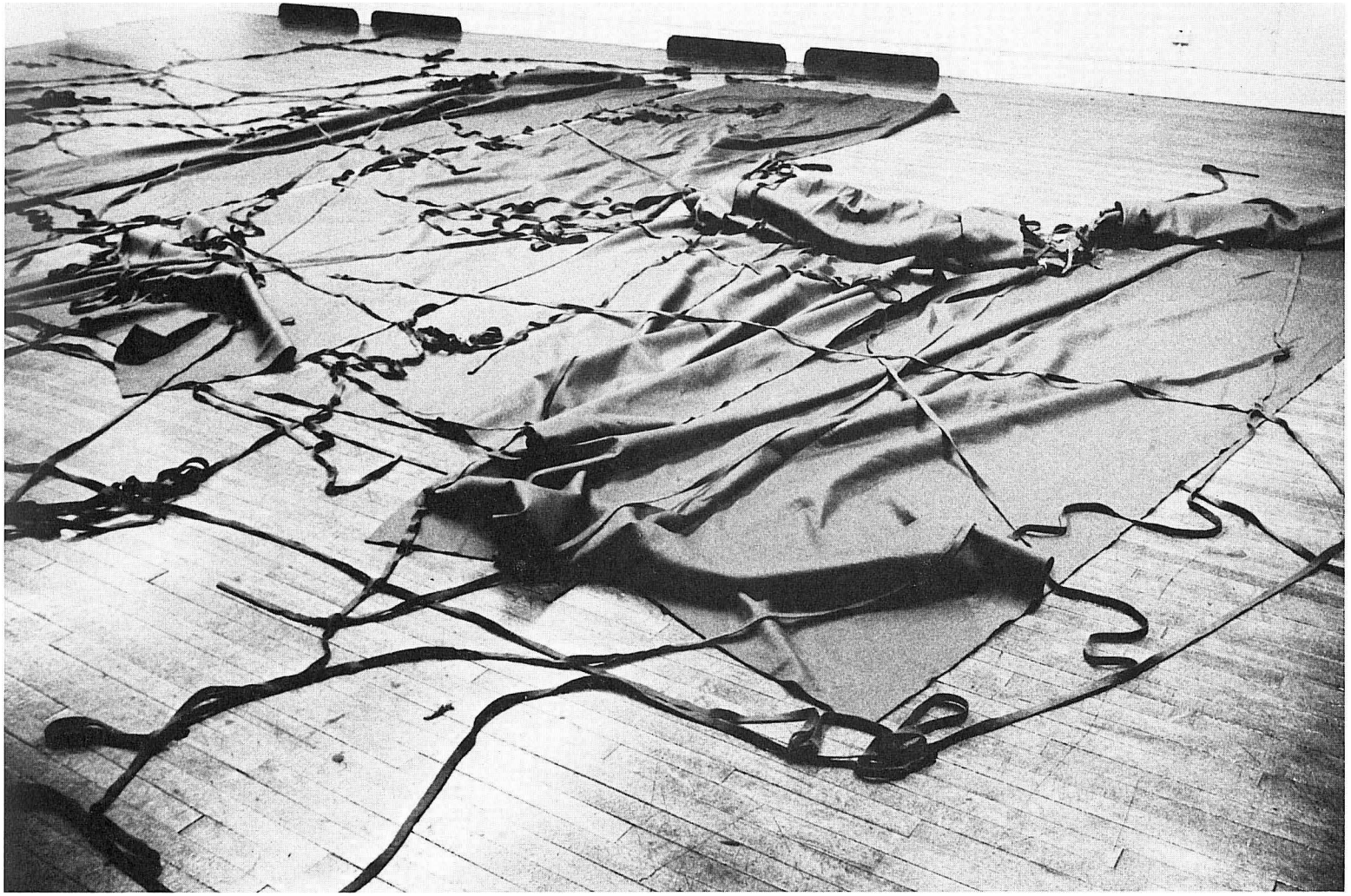
Partially Indicated Boundaries: Sections within, cut, 1967
Grey and black felt, wood
Dimensions variable
Daniel Weinberg Gallery, San Francisco, California
Collection of Fredericka Hunter, Houston, Texas

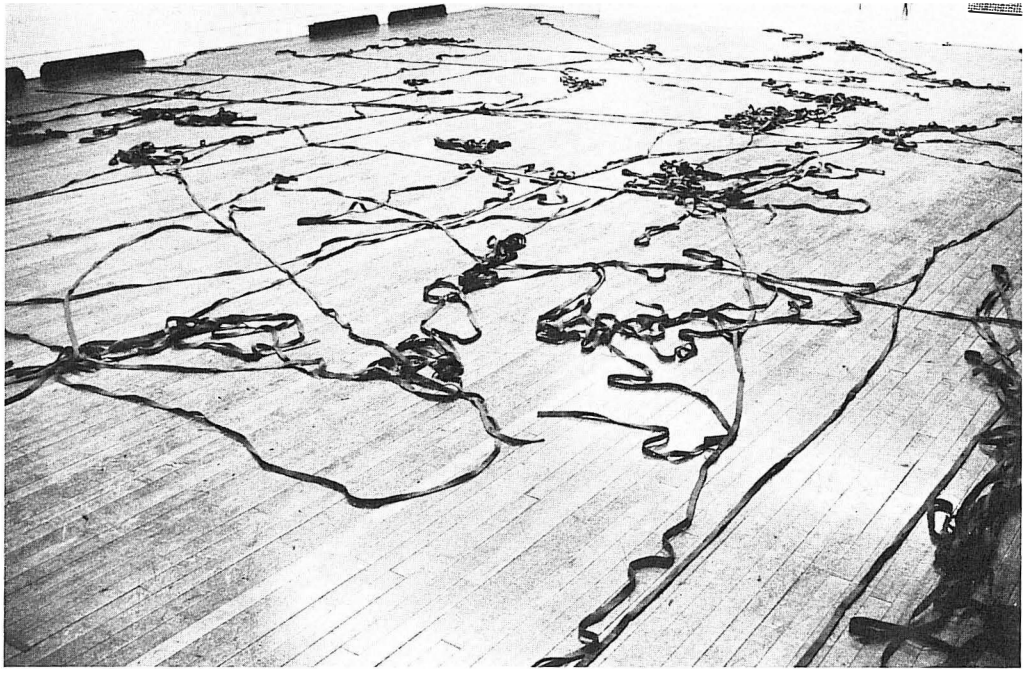
Robert Shankar

viewer, looking at the "clues," could reconstruct the activity of throwing, the sequence of throwing, and the position of each throw. Like breaking, running, blowing, or scattering, throwing was an activity which Le Va explored again in other ways.

The nature of a physical logic, rediscovered through visual clues, was also the central issue of a 1971 piece done at Galerie Ricke in Cologne; it was a piece which seemed to resolve some of the differences between physical and intellectual logic. Using red and gray bricks, thrown from different points on four overlapping lines, marking two large X's in four rooms of the gallery, the actual piece consisted of marks on the wall where the bricks hit, the remnants of the bricks on the floor from the position of throwing, and an occasional entire brick which could not be thrown due to the intervention of such architectural details as pillars. The piece was based on what could or couldn't be done and on the absence of what was seen or the presence of what was not seen. The implication of energy, even violence, was directly related to the quality of mystery resulting from not knowing exactly what had happened, or why, and the ability, through careful reconstruction of the sequence, to retrace the

Source (Sheets to Strips) *studio installation*, 1968
Felt
40 × 60'





Source (Sheets to Strips to Particles) #1 *studio installation*, 1968
Felt
40 × 60'

Strips *studio installation*, 1968
Felt
40 × 60'

activity in time.

Thus, according to Le Va, the order was not a result of mathematical logic, but involved position, force, barriers, boundaries, and locations that resulted from the activity. "If there's a certain kind of action, there's a certain kind of result." Mathematical logic for Le Va is static. If A plus B equals C, the equation is complete in itself. He is interested in "no step, no form, only the stoppage of an instant of time in that process."

Between the large-scale chalk pieces and the red and gray brick piece at Ricke's, a circle series began as an extension of interests now seen as integral to the work in every form. In this series, the artist used stone markers (grinding stones) as the centerpoints for large circles, leaving only very simple, visually spare clues as to the configurations of the circles marked. Some, like four installations at the Nigel Greenwood Gallery in 1971, had centerpoints and intersections of multiple circles marked separately; others, like the *Yale Centerpoint Series* (1972) had only the centerpoints marked; still others, like the Contemporary Arts Center, Cincinnati, installation (1974–75) consisted of marking both the central points and the tangencies of overlapping circles. (These last were marked by lengths of wood rather than points.)

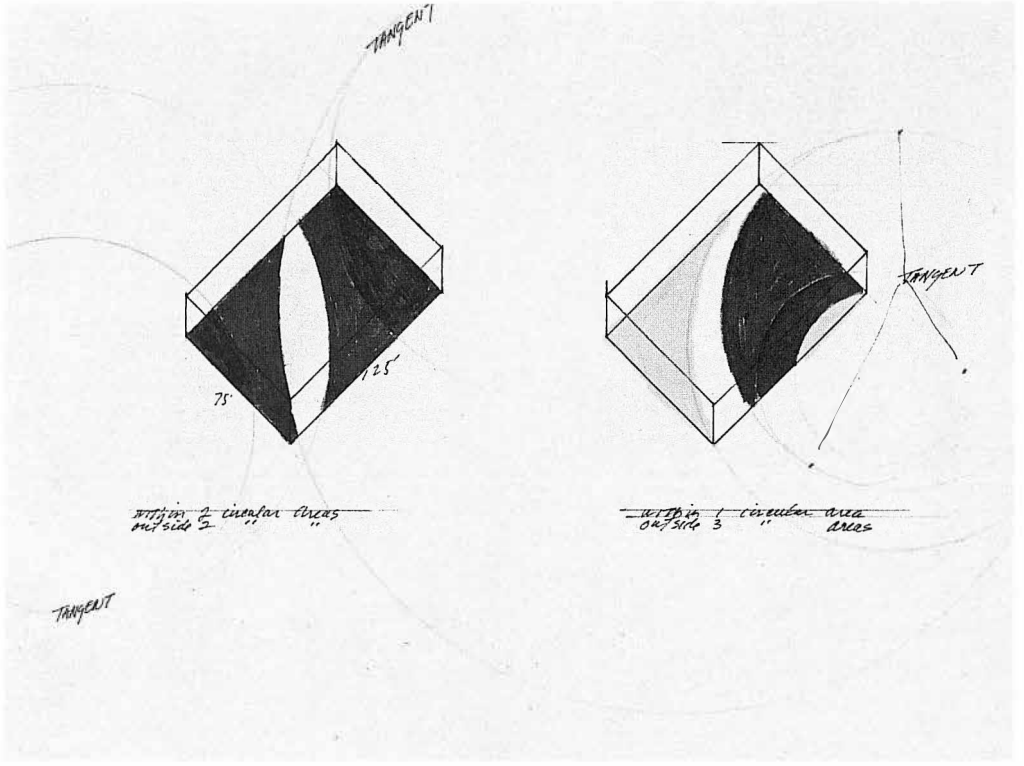
As with all his work, Le Va's titles explained what to look for, but the con-

Untitled, 1968
Grey felt
Approximately 40 × 60'

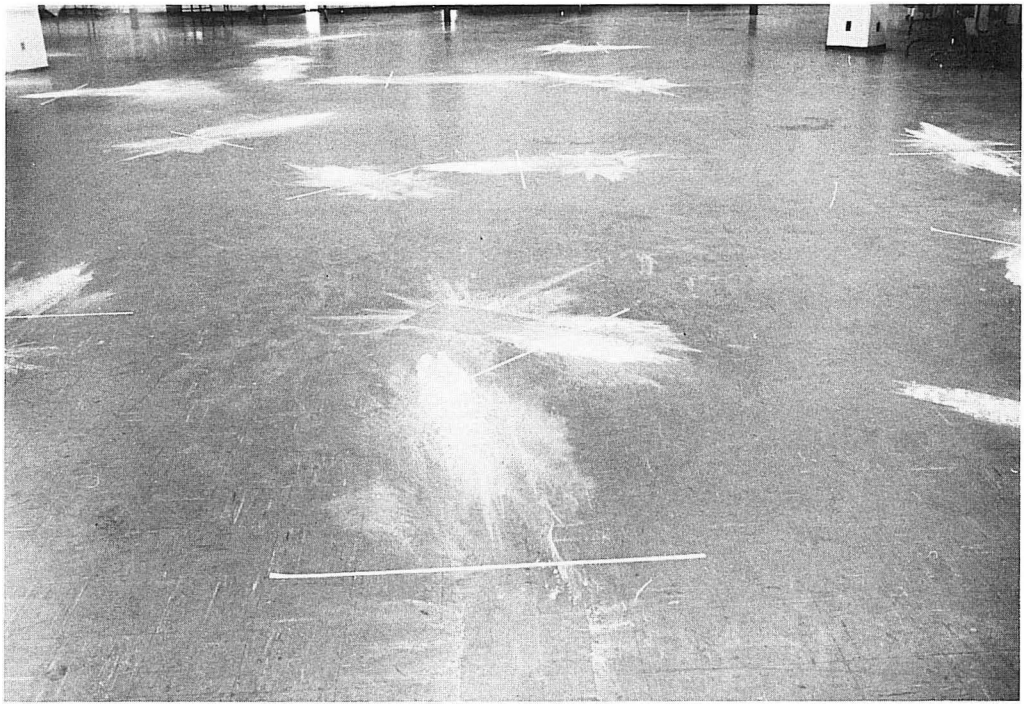
Diagram for Installation with red iron oxide, black oxide and chalk, 1968
Colored pencil, felt-tip marker and ink on paper
9 × 12"

ceptualization of what occurred, or in this case, what was marked, was a more complex process, requiring the viewer to make mental and physical readjustments of position in the space. Because the circles were so large, the underlying logic of the pieces were difficult to grasp; the feeling was that of wandering through a mental maze. The viewer's notion of time shifts and expands in the experience of the piece, since one is forced to change position constantly, seeking the one solution in myriad possibilities.

The *Circle Series* was interrupted by the seminal *Walking Stick* installations and drawings (1972–73), in which only the lengths between points were marked. Le Va had begun, in these installations, to use 1½" round pine doweling in an attempt to divest the materials being employed of esthetic associations. Le Va made the *Walking Stick* pieces by taking a stick of a standard length and walking it end over end and/or zigzagging it. The position of the stick after each move was marked by cutting an inch off its end, and leaving the piece to mark the position of the stick at that moment. By using the stick itself to mark its own movement through time and space, the series of movements could be reconstructed by the observer by retracing the events backwards in time. The distances between marked points became less the more the



Chalk: Scrapped and Drawn [on converging (but different) vanishing points] *studio installation*, 1968
Chalk
80 × 80'



stick was moved, until eventually it was completely destroyed, or hit a barrier like a wall. As the piece progresses, it exhausts itself; the *Walking Stick* pieces are a concretization of the idea of destroying while making.

Le Va was attempting to make the process of motion, in a four-dimensional space-time situation, stable (both visually and physically) by using the stick to mark its own path. To find out how long the original stick was, the viewer must travel back along the path of physical activity, while traveling forward in time. As the pieces became conceptually more complex, the temporal dimension expanded as well. If a number of different lengths of wood were utilized, they seemed to be traveling faster or slower—that is, the shorter sticks, exhausting themselves more quickly, seemed to be "faster," but always relative to other, longer sticks.

The *Walking Stick* pieces made clear the relational nature of Le Va's work. In all the earlier work, he assiduously avoided any stable situations, preferring everything to be seen in a state of flux. The photographic pieces extended this idea by creating flux out of changing relationships of scale or vantage point. "If there's any point of view in the work as a whole," says Le Va, "it's relational. To change one thing is to change the whole thing." From about 1973 to 1975, however, Le Va was no longer concerned only with activities taking place within a specific architectural area. He began instead to deal with the more ephemeral qualities of time as a major point of concentration, since space is measurable, and time is entirely subjective and relational.

Le Va is concerned with transformations, fluctuations of distance and scale, figure/ground reversals, potential and actual change in material over a period of time, in movement and participation. "There's room to make a decision in all my work. Everything I do is about relationships. People assume it's a system, but it's not. However, within the construction or operation of the work, there are clues to every decision made, and to why it's been made." In this sense, Le Va's work shares with many other fields, especially mathematics and science, a growing awareness of relationships as being of greater importance than their terms.[15] Since a relationship is a way of distributing elements, recent architectural theory also finds that formal relations necessarily are tri-

Installation #1 Outwards (from the left), 1969
Chalk mineral oil and paper toweling
25 × 35'
Minneapolis Institute of Art, Minneapolis, Minnesota

dimensional or "spatial," as the elements are mainly masses and spaces. Moreover, spaces formed by means of a comprehensive coordinate system, not unlike that which is the underlying structure in Le Va's work, have the character of a neutral continuum in which form can become meaningful.[16]

A brief analysis of how things in general are structured, found in Albarn and Smith's book *Diagram, The Instrument of Thought*, is closely related to the way in which Le Va's work is structured.

> The logical form of a thing depends on its structure or the way its parts are related to each other. By changing the *relation* of the parts... their mutual relations of *order* are different;... the thing is transformed. This is a common game in creative thinking. Those parts which are connected by a relation are called terms. Relations and terms are interdependent. A whole hierarchy can then be built of structured elements and operations of ordering.[17]

Such changing relationships, or transformations, are at the heart of Le Va's work. When he indicates that his installations require a great deal from the viewer, he is initiating both a perceptual and intellectual transformation which is, however difficult in the context of sculptural experience, nonetheless part of our everyday lives, because our interaction with the environment requires a constant readaptation to it: that is, we must change in order to live. According to Albarn and Smith, "transformations are the means by which life evolves and our own creativity flourishes. Perception is itself a transformation and, through illusions of ambiguity and paradox, a generator of further transformations."[18] When Le Va requires us to understand the nature of the relation between the terms, or elements, of his pieces by reconstructing the making of the piece backwards in time, he is forcing upon us a learning process by which we must see a given set of elements in different contexts and constantly choose among sets of alternatives in order to find the "correct" one. Such abstract thought in general depends upon the ability to see forms in different contexts; it is crucial to visual thinking and indeed, to creative thinking of all kinds.

> In order to handle abstractions we must discover or intuit their logical form. Although this ability is latent in all of us... our educational system does not encourage the examination of pure form, the ability to handle abstractions. This latent ability merely needs lifting from the unconscious to the conscious and made explicit.[19]

Such "lifting" is, indeed, what Le Va does in his work, which may in part explain why it seems so unfamiliar, so difficult to "understand." Le Va's involvement with abstractions, that is, forcing intuition of the relations in a set of elements through a combination of physical and mental participation, has always prevailed.

Since 1968, his fascination with the mystery genre, with "clues," has led him to quote the introductory passage to Ellery Queen's *French Powder Mystery* as an indication of his own thought processes:

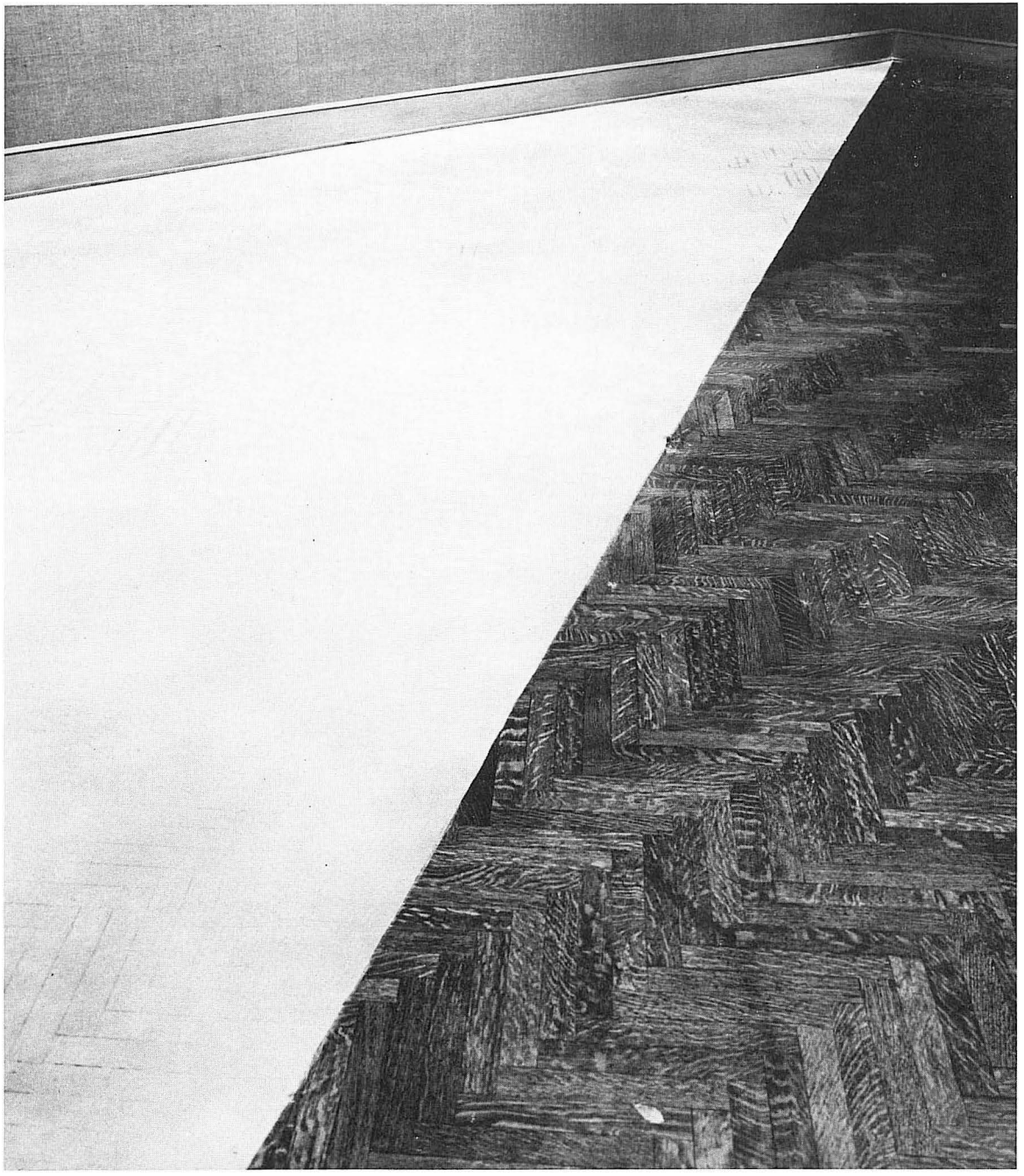
> A clue in the detectival sense may be of an intangible as well as a tangible nature; it may be a state of mind as well as a state of fact; or it may derive from the absence of a relevant object as well as from the presence of an irrelevant one... But always, whatever its nature, a clue is the thread which guides the crime investigator through the labyrinth of nonessential data into the light of complete comprehension....[20]

Thus, a clue is a remnant or residue indicating that something happened; enough clues presumably will lead to *what* it was that happened. In a photographic series for his own research, done in 1971, Le Va took pictures of

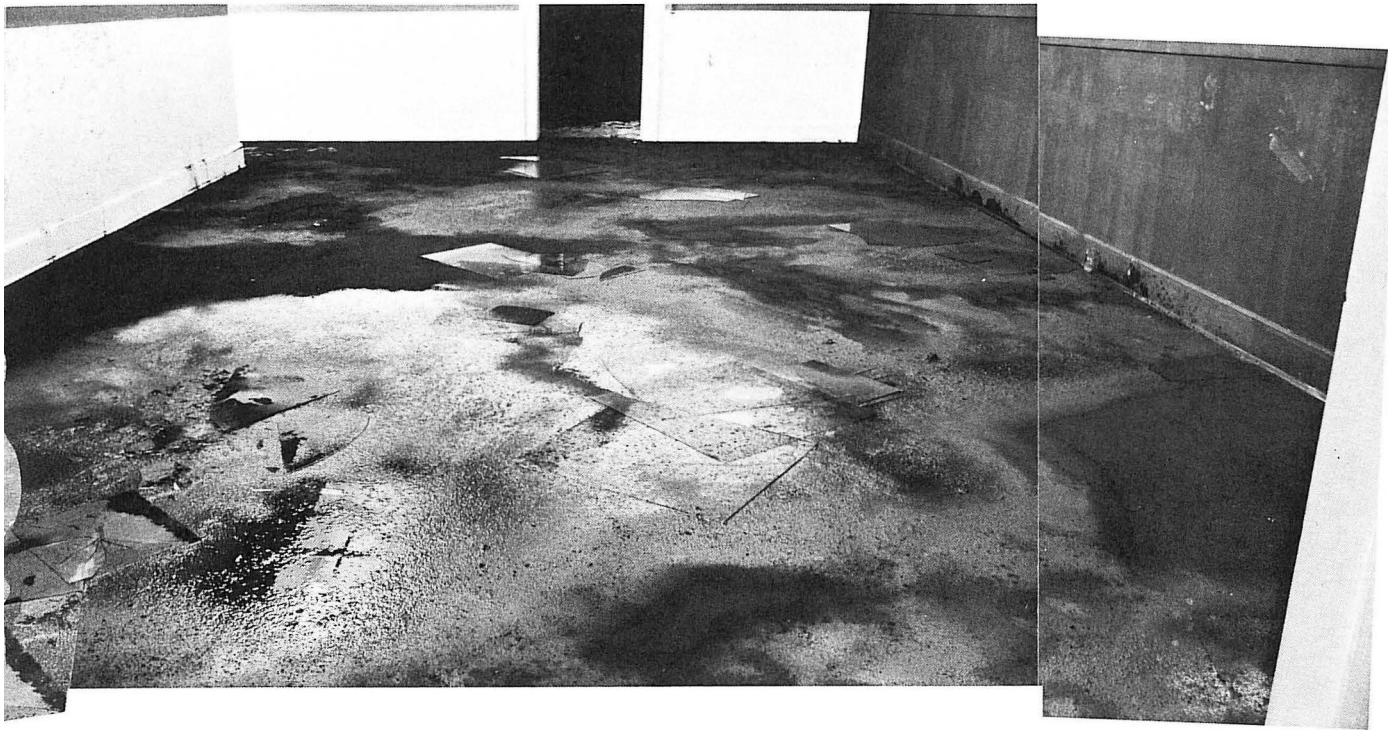
> underground garages, telephone booths, elevators, and lobbies that seemed to have a ring of science fiction: places where particular events occur and then dissolve into the environment. Most of the time these are vacant spots; occasionally they're crowded. They're in-between places that one travels through, but to which one wouldn't go specifically.[21]

Le Va was bemused by the traces of an occurrence, by the transitory nature of an activity in a stable physical setting. Such interests even led him to attempt to write a

Installation #2—Right Angular Section (on a diagonal), 1969
Chalk
25 × 35′
Minneapolis Institute of Art,
Minneapolis, Minnesota



Room 2 of a 3 room, 3 part installation utilizing various quantities of the 3 materials, 1969
Glass, mineral oil, and red iron oxide
Approximately 30 × 50′
Installation at Walker Art Center, Minneapolis, Minnesota



science fiction novel in which "thoughts are assigned fluctuating positions in space, and the time sequence is distorted, placing the reader in an ambiguous situation."[22] In all these pieces, the content is changed by changing the vantage point, temporal and spatial sequence, scale, or attitude. This kind of non-linear, synchronistic thinking becomes even more evident in the work from 1970 on.

II

An important issue raised in the *Walking Stick Series* was that of clarity; Le Va asked himself whether it was necessary for the viewer to understand the work in its entirety, or indeed if the audience could be counted on to attempt to decipher the situation at all. He questioned the limits of complexity crucial to an understanding or interpretation of the work, and in so doing eventually extended the participation of the audience beyond the duplication of his own activity in constructing the piece.

Because all the locations in his previous work had been based on a certain kind of activity—throwing, scattering, layering, breaking, distributing, marking—Le Va became interested in finding another structure, one expressed through time, but not based on a physical activity determined by the artist.

Beginning with the 1975 *Accumulated Vision Series*, the logic of the configurations that occurred inside the architectural space was determined by a projected vantage point outside that space. In the first of these new pieces, a configuration on the floor, for example, would be projected from a vantage point outside the room, then moved to another point on the floor. The configuration itself was decided upon by the artist, and based on the first barrier it met within the visual projection path. Because the pieces are based on the principle of projected vision in the manner of a camera lens, and are mapped out in

drawings first, everything that appears on the wall or floor has a reciprocal position beyond the actual gallery walls.

The first pieces were visual projections resulting from a specific position that existed only above or below the floor; later works became increasingly complex, using multiple vantage points outside the room at various heights and distances. The size of the configuration would be determined by how close to or far away the eye was from the end points on the floor. Because of the similarity to the way a camera lens works, if the eye is close to an end point on the floor, for instance, the configuration appears larger. Consequently the varying sizes of the configurations, though actually a result of projected distance, also have a temporal aspect, seeming to be faster or slower (as were the shorter and longer lengths of the *Walking Stick* pieces). The space of the room appears to expand and contract, as two different-sized elements appear on the same wall in different positions, depending upon the projection source.

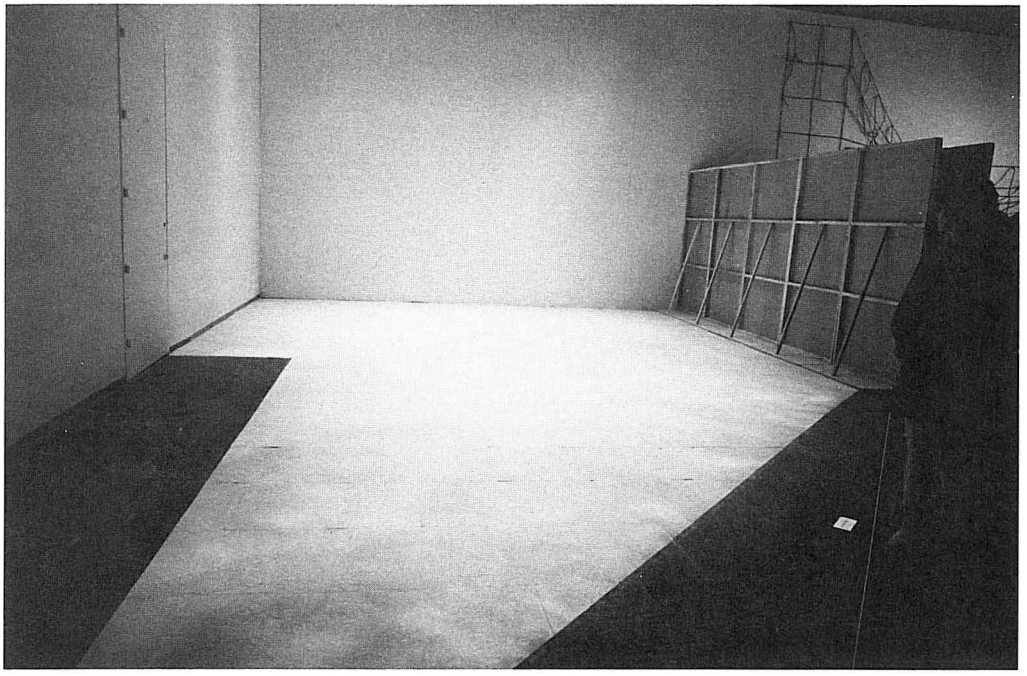
Le Va's recent works from about 1976 to the present, almost impossible to describe in words, become clear in the drawings from which he always works. The visual points from which the configurations are projected and how they ultimately occupy the locations they do, are plainly shown. In the most recent *Accumulated Vision Series*, the further complexities of treating the wall as a physical boundary, which will affect what can or cannot appear on it, are clearly rendered in the drawings. Theoretically, the observer is placed outside the space in which the piece is situated, either below or above eye level. An additional boundary is added outside the physical boundary (or walls) of the existing space. Because the boundaries are arbitrary, indicated only in the drawing, a different set of clues is presented which become more difficult to interpret, and which fluctuate because the outside boundaries are also tilted on an axis. For instance, in several of the *Accumulated Vision* drawings, the corners of the implied boundaries that cut through the corners of the actual or real space are what is projected, and therefore are what we see within the gallery space. Le Va also uses multiple points of view, which can be understood as four points of view that are simultaneous (implying four viewers) or one point of view that constantly changes. As seen in the most recent drawings, the boundaries are multiple, situated (like the earlier *Circle Series*) inside each other.

Finally, Le Va considered the problem of blocking the angle of vision itself. He had destroyed the necessity of establishing a vantage point inside the literal space of the piece; he had utilized varying distances, vantage points, angles, and axes of vision; he had established arbitrary boundaries, outside the space, from which multiple configurations could arise and exist simultaneously, with changes of position and size. Now he arrived at what he at present considers a paradoxical situation—a concern with providing only what wasn't blocked in the field of vision. Thus, only that part of a configuration not blocked by an obstruction or actual boundary (such as a wall) in the field of vision would be presented. In *Accumulated Vision, A Continuance* (1978, Sonnabend Gallery, New York) a masonite barrier was built on top of a gallery wall to indicate where an obstacle in the field of vision had occurred. Le Va says of these pieces:

> I'm not interested in the notion of altering spaces unless they're mentally rather than visually altered. I seem to accept the space as what it is. It's gotten to the point of my not caring about the space. Once I've denied its physicality by projecting, by assuming a boundary outside the space, implying X-ray vision and dealing with a principle, or an ideal, by blocking a part of one's vision, I won't accept the architectural wall as a method of blocking. If I assume you can mentally project through it, I have to build another wall over it. I have to violate one function and accept another. I've gone full circle, from accepting a physical arena in the early work to denying it even exists. All space for me has become a prop, just as it's become a vacuum as well.

Most recently, Le Va has begun to think about the possibility of making permanent outdoor installations in public places; the potential for altering the "mental spaces" of

Anti-Illusion:Procedures/Materials Exhibition
omitted section of a section omitted, 1968–1969
Flour
Dimensions variable
Whitney Museum of American Art



Steve Balkin

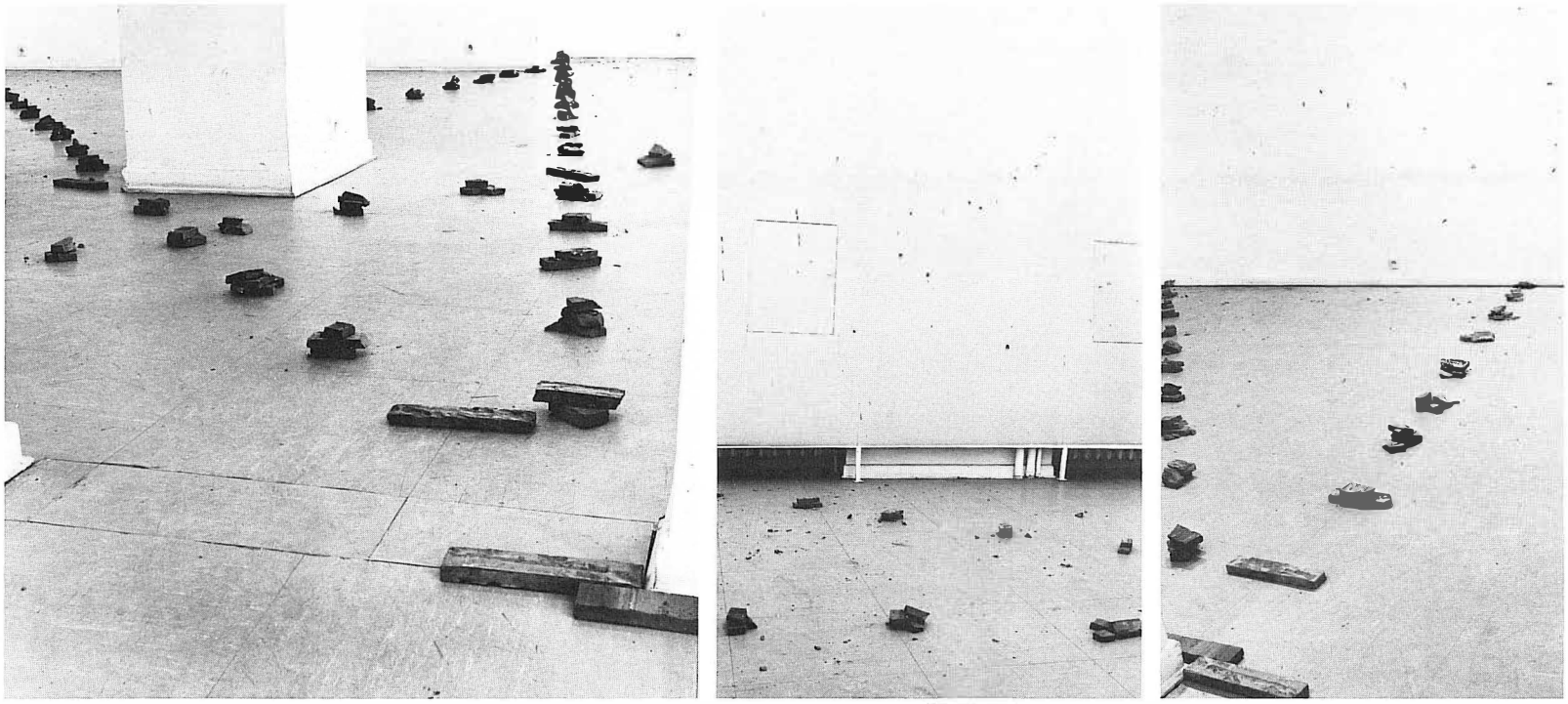
large numbers of people passing through a plaza, mall or other heavily trafficked site once again brings Le Va's work full circle, back to some of his earliest concerns.

The aspect of "audience" involvement in Le Va's installations is one important key to the evolution of his work. In the earliest pieces, particularly the felt distributions, the audience was placed in relation to work within a specific arena of activity; later, it was placed in relation to specific places or locations in which an activity took place. With the chalk installations, viewers were forced to consider the boundaries of what was visible in relation to other boundaries existing outside the space they occupied, and this was made more complicated by forcing them, in the *Circle Series*, into a kind of mental maze. With the red and gray brick piece shown at Galerie Ricke, the audience was required to reconstruct an action in relation to the room and to understand which activities could or could not take place in it, and why. The *Walking Stick Series* necessitated the reconstruction of specific paths of travel (movement and activity) in time, so that the viewer, in that mental reconstruction, would place him or herself in the position of the artist when the work was being generated. Finally, the viewer's point of view was moved outside the actual space, into a mental domain of numerous, complex viewpoints, so that the physical, visual and mental components of the audience's activity had to be ultimately integrated in order to comprehend the work.

Le Va's concern for the audience, while shared by many of his peers, is extreme by comparison. His work, he feels, is "educative" —that is, it attempts to provide viewers with something they do not already know, to establish a dialog, an exchange between art and audience. "What you give the work, it gives you," he says. The demands on the viewer seem extreme because the work is not seductive; it does not extend itself toward the observer, but only reveals itself by virtue of one's willingness to reconstruct the sequence of events or the visual situation which created it. "I am trying," he says, "to make the audience an active part of the time structure from beginning to end, part of the past, the present, and the eventuality."

In one way, Le Va's concerns seem closest to those of theater; in fact, he recalls that when in school, he was drawn to theater and dance, though more for doing sets or props than for performing, and it

Criss Cross Shift (place to point to place), 1970–1971
Grey and red brick
Dimensions variable
Gallery Ricke, Cologne, West Germany

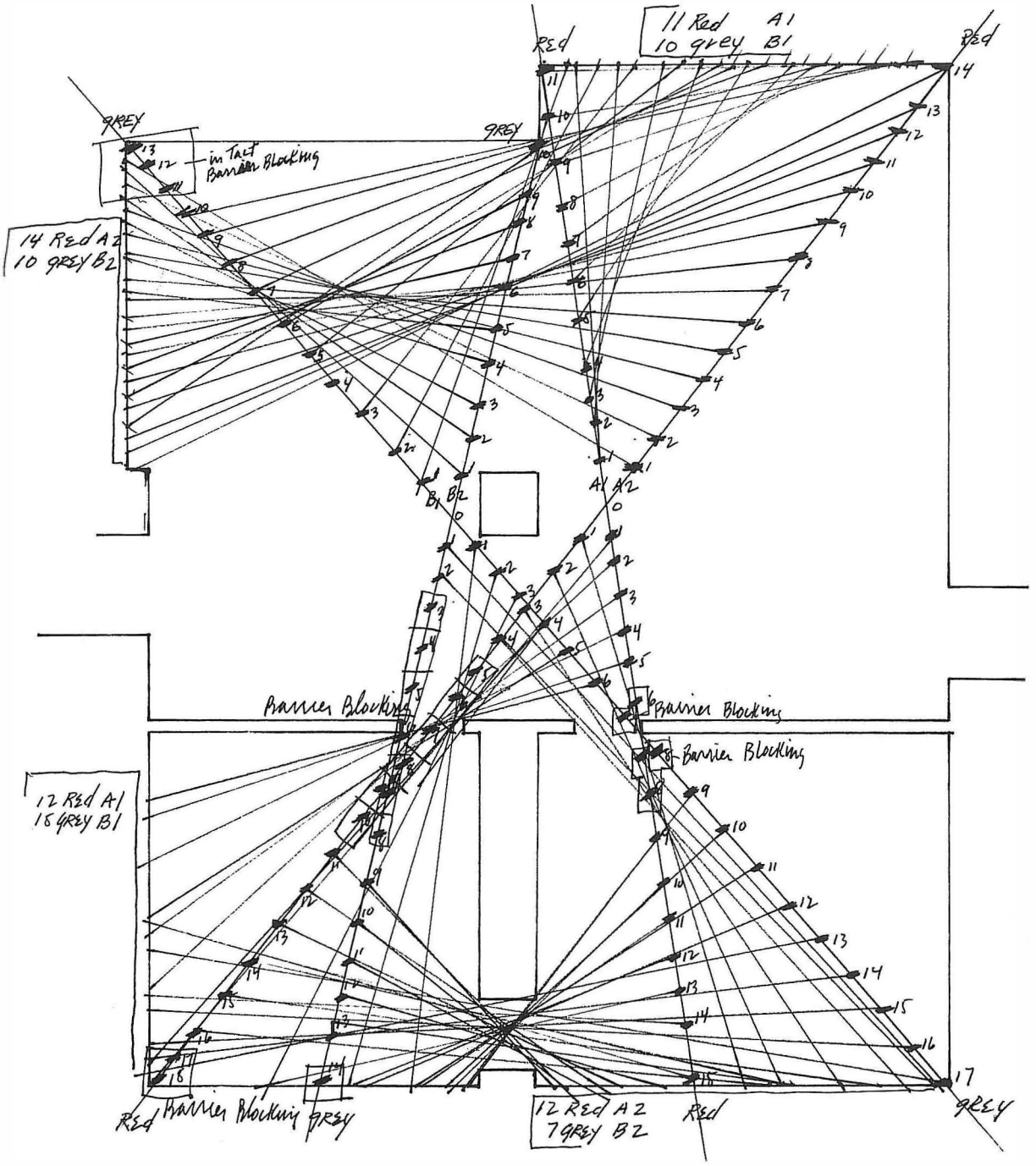


was then that he first became curious about the properties of movement in general. "Theater interested me the same way street traffic interested me, in terms of empty spaces versus occupied ones. I suppose I would have liked to direct movement in some way."

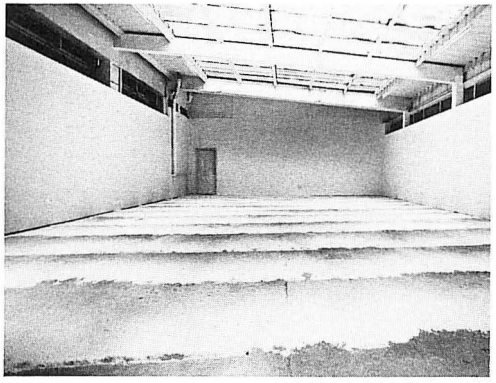
The earliest constructions, with their implications of an action that had already happened, had something of the quality of tableaux. Similarly, the felt distributions, the *Layered Pattern Acts* of 1968–72 (especially the large broken glass pieces and the mineral oil, oxide and glass works of 1969) had a dramatic quality because of the violence of the gestures which had created them. *Cleaved Wall* (1971) was extremely theatrical in its final form, although its intentions were of a logical order, related more to the physical logic of the Ricke brick piece than to violence *per se*. Similarly, *Impact Run* was seen by some as an expressionist/masochist fantasy, rather than as the manipulation of an audience toward a visual response without a visual activity prompting it.

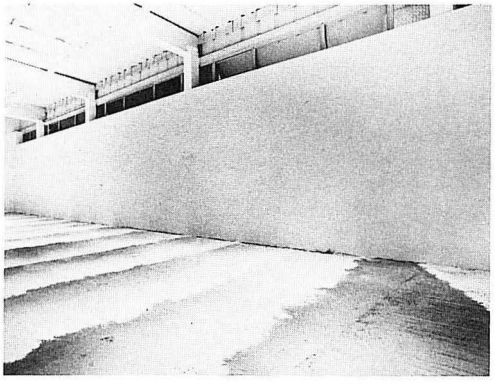
The definition of "theater" is no less difficult than the definition of "art," but Le Va's work crosses whatever boundaries there are between the two by virtue of its concern for the audience, its evolution in a four-dimensional space-time continuum, and its potential for approximate re-enactment

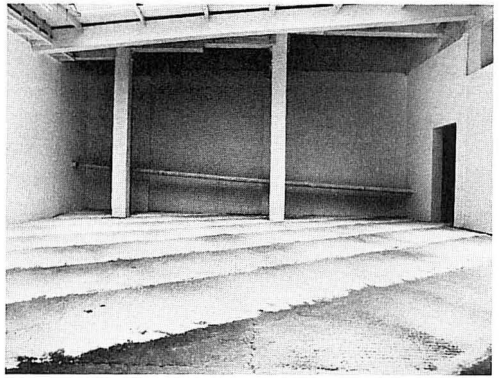
Wolfgang Keseberg



Extended Vertex Meetings: blocked; blown outwards, 1969–1971
Blown flour
Approximately 25 × 85'
Nigel Greenwood Gallery, London, England







through the use of diagrams, which could be said to function as scripts. Because all of Le Va's work is prompted by specific physical activities, it also resembles dance, especially the *Walking Stick Series* with its strong choreographic element.

What is unique about Le Va's involvement with the audience is that he changes the viewer's role from a passive to an active one, so that our experience of the work becomes integral to the work's existence. It is the constantly shifting relationship between viewer and work which itself becomes the content of the work, and which also relates it to certain issues in other fields of investigation.

For instance, a major philosophical problem of science in the 20th century centers upon "uncertainty," the impossibility of making absolute measurements in the observation of physical phenomena.[23] The inability to find an objective system of measurement, the fact that phenomena can only be considered in relation to each other and to an observing body, and the alterations in "reality" effected by the imagination seem to be at the root of Le Va's conviction that it is possible to alter reality by changing the viewer's behavior in relation to the work being viewed.

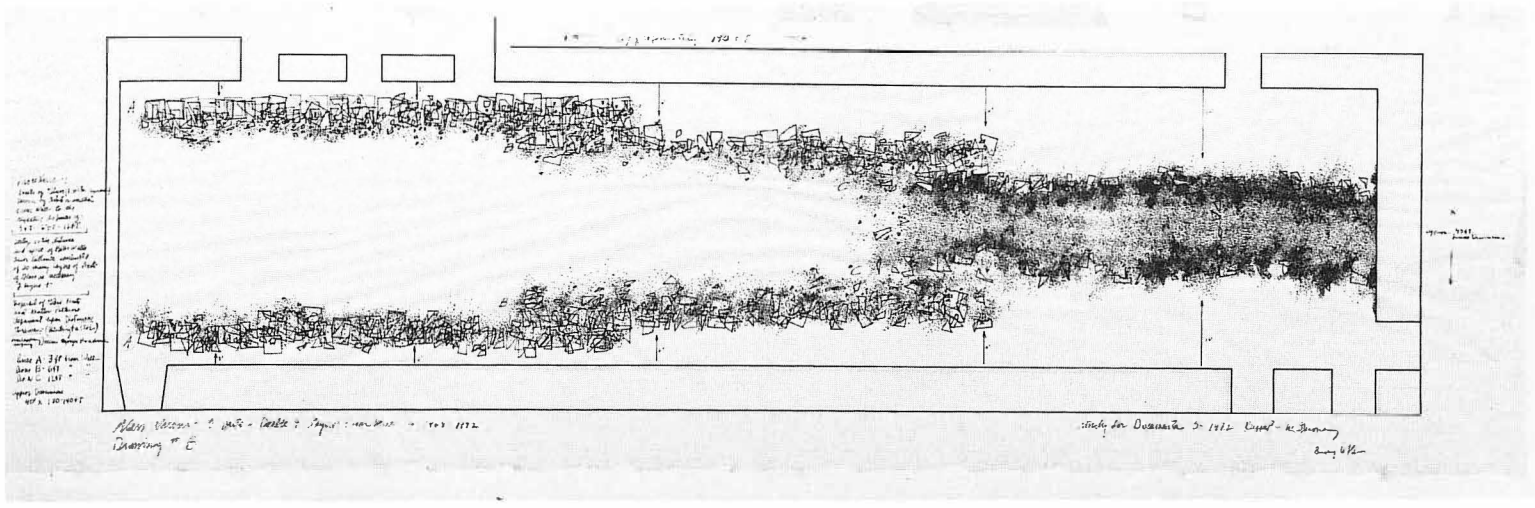
The visual simplicity and mental complexity of Le Va's work remind us that what we *see* is not the content of thought, but serves as a stimulus to a psychological mechanism, that is,

> visual structures are nothing but an aid to thinking and belong to the psychological apparatus which draws the conclusions, not to the content of thoughts themselves. Thinking does not aim at the pictures but at the logical structure which they express.[24]

On the other hand, Le Va is not interested in removing all visual or physical elements from his work, given that in physical reality it is impossible to think abstractly about relations without providing some concrete model or symbol system. The form of the model, symbol or visual element is not essential to the content of thought; it must exist, but the form it takes is relatively unimportant.[25] Over the years , Le Va's tendency to move as far away from the making of objects as possible and to use materials with no intrinsic value, no esthetic reference, no psychological associations, no substance, and no sensuous appeal indicates an understanding that though visual elements are essential to abstract thinking, *what* the elements are may not be essential. The use of the simplest and least seductive element imaginable—a wooden stick—is neutral enough to make clear that the *relationships* among the visual elements constitute the meaning of the work.

Le Va has said that while his work was "about relationships," it was not about systems. The *Walking Stick* pieces, for instance, give the sensation of durations of movement and points of rest, fluctuating as the viewer changes position in the space. This kind of work is an illustration of a

Within the Series of Layered-Pattern-Acts (Glass thrown in 3 parts: 3', 6', 12')
Double Layers from Wall
Installation Plan for Documenta, 1968–1972
Felt-tip marker and ink on tracing paper
18 × 54"
Collection of Rolf Ricke, Cologne, West Germany



major tenet of relativity theory—that the length of an object depends upon its motion relative to the viewer. In Le Va's work, it is the viewer who must move relative to the points of reference. Since the length of an object depends upon its motion relative to the observer, it follows that the object contracts in the direction of its motion, and is longest in a frame of reference where it is at rest in relation to the observer.[26]

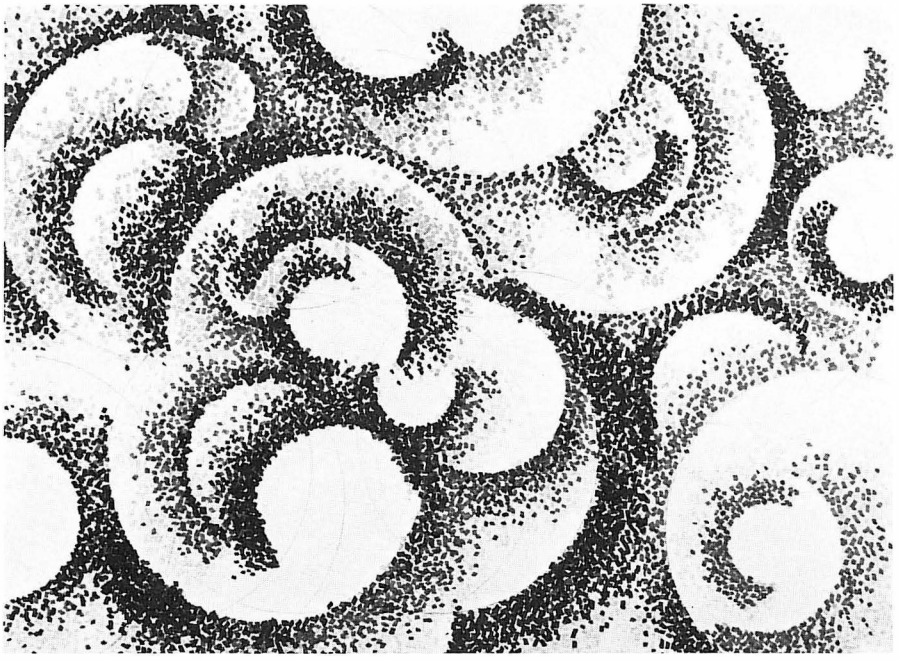
Le Va cuts an inch from each stick as it pauses after one movement. Consequently, the stick is at its longest where the movement began, i.e., at its "point of rest," and shortest (or "fastest") when it is closest to no longer existing, or when it reaches a boundary at which it can go no further.

Moreover, Le Va's work denies the assumption that there is an absolute, or fixed standard by means of which one can measure everything. In the *Accumulated Vision* series especially, the size, shape and placement of each element we see varies according to the hypothetical point of projection. In this series, as in physics,

> it makes no sense to ask which is the 'real' length of an object just as it makes no sense in our everyday life to ask for the real length of somebody's shadow. The shadow is a projection of points in three-dimensional space on a two-dimensional plane, and its length will be different for different angles of projection. Similarly, the length of a moving object is the projection of points in four-dimensional space-time on to three-dimensional space, and its length is different in different frames of reference.[27]

Thus, in Le Va's work as in relativistic physics, the role of the observer is crucial, since in both an absolute, requiring no verification outside itself, does not exist.

Le Va's pieces up to about 1970 (through the *Circle Series*) used space as the primary vehicle for content. The extremely large felt pieces were not adaptable to *any* space; thus most of them were not executed. However, even in those pieces which were clearly located both mentally



Within the Series of Layered-Pattern-Acts Installation Plan: Half Circle Glass Throws: 4', 8', 16', 1968–1972

Felt-tip marker, pencil on paper
Approximately 24 × 36"
Private Collection, West Germany

Within the Series of Layered-Pattern-Acts Documenta V, 1972

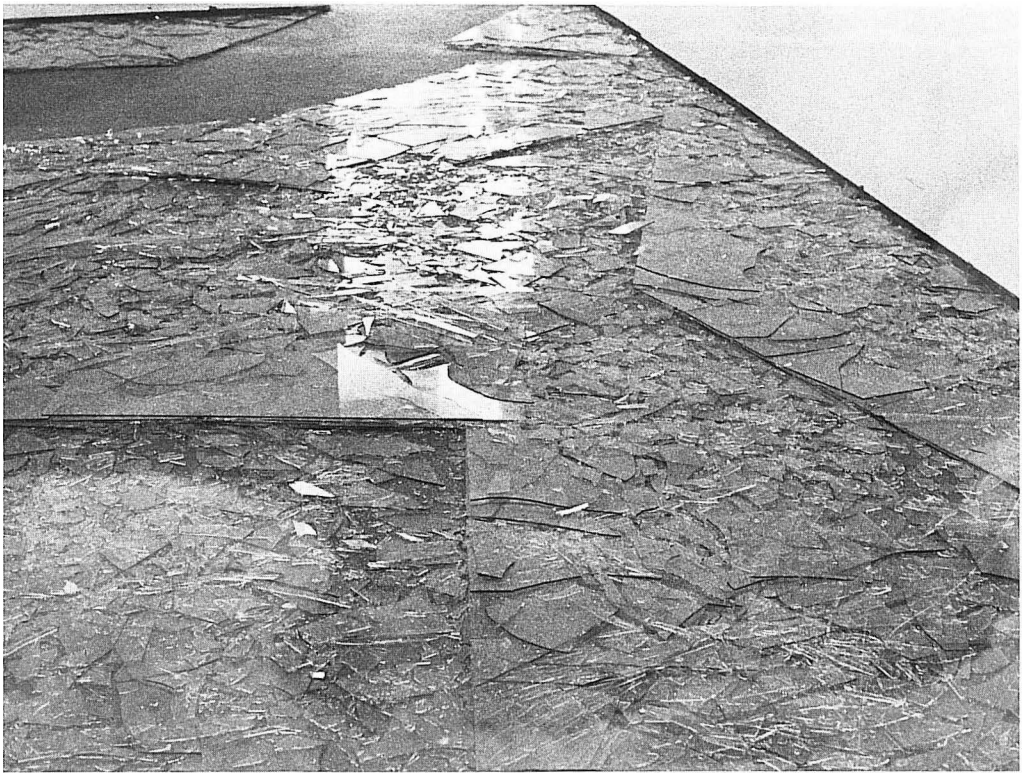
Glass
24 × 36"
Private Collection, West Germany

and physically within a specific area, the nature of a contained architectural space was such that it lent itself readily to the kind of non-linear process of understanding that is integral to Le Va's work.

A space, like a work of art, can be analyzed in terms of a structural hierarchy of relations of primary and secondary elements existing on several levels, subject to change according to various situations in which it participates.[28] As becomes clear from viewing his drawings, Le Va often sets up a single formal structure in different kinds of possible (or hypothetical) spatial situations. Thus one finds several very similar drawings of works designed for larger or smaller rooms, or single and multiple possibilities for any given configuration. (See, for example, the 1973 series of installation studies of *Unequal Lengths Cut to a Circular Plan*, which includes both diagrammatic and isometric perspective views of one, two, and three-room installations.)

Christian Norberg-Schulz, the architectural theoretician, describes at least two different major kinds of spaces. One is formed by what he calls a comprehensive coordinate system, the other formed by an enclosed space element consisting of masses

Layered-Pattern-Acts
Documenta V, 1972
Glass
30 × 70'
Kassel, West Germany



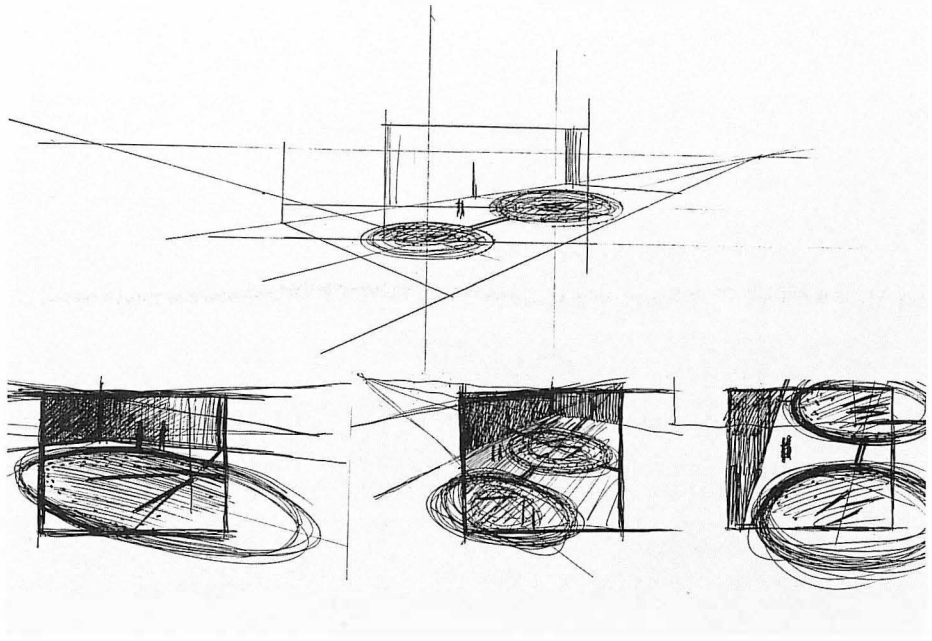
rather than skeletal elements. The former has a weaker figure-character, and constitutes a neutral continuum within which there is the potential of modifying the coordinate system by leaving out, emphasizing or connecting points within it. Ways of modifying the coordinate system include combining two or more types of geometrical relations by introducing organizing centers or axes.

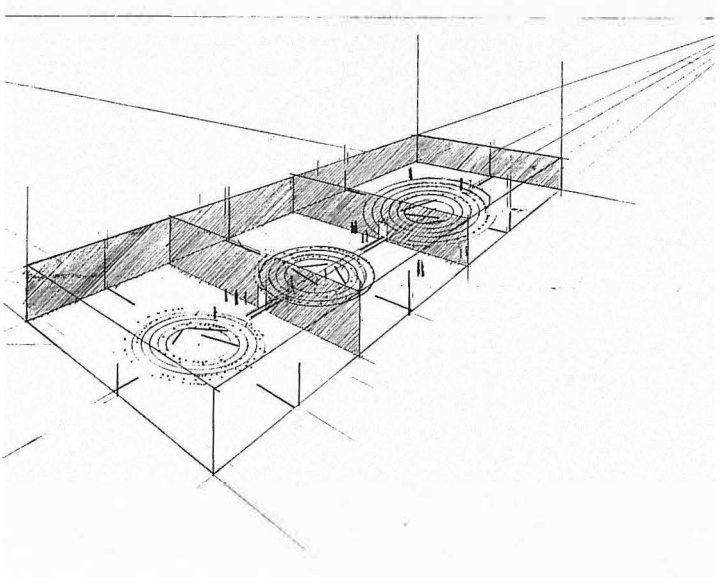
> The latent 'structural skeleton' is thus made visible, and the form becomes pregnant. An element placed in the centre of one of the sections of the coordinate system has this effect, while an irregular position produces a certain "tension." A real "conflict" (which may be intended) is created through the introduction of accidentally placed centres and axes. A complex system of geometrical relations may also consist of a combination of symmetries and asymmetries. The possibilities mentioned play an important role in the visual arts and architecture.[29]

Such pregnant forms, tensions and conflicts in Le Va's work take it beyond the realm of ideas or "pure" vision into an arena where states of mind and feeling are very much in evidence, even if the specific meaning often remains enigmatic.

When Le Va discusses his concern with educating the audience as opposed to "making things," he stresses the necessity of transmitting information in a form that is connected with human expectations.[30] Thus, Le Va utilizes materials that are not esoteric, he titles his works succinctly to help the viewer understand what to look for, and he shows drawings along with installations to indicate in a two-dimensional way the nature of his thinking. Especially in the drawings from which all the installations stem, he establishes a clear relationship to other diagrammatic systems so that we may make the transition from two to three and then to four dimensions.

Because so much of Le Va's work overlaps in time, it is impossible to establish an exact chronological sequence for the drawings. Between 1966 and 1967, however, while making the transition from colored felt to gray, black or gray and black felt to eliminate any reference to painting





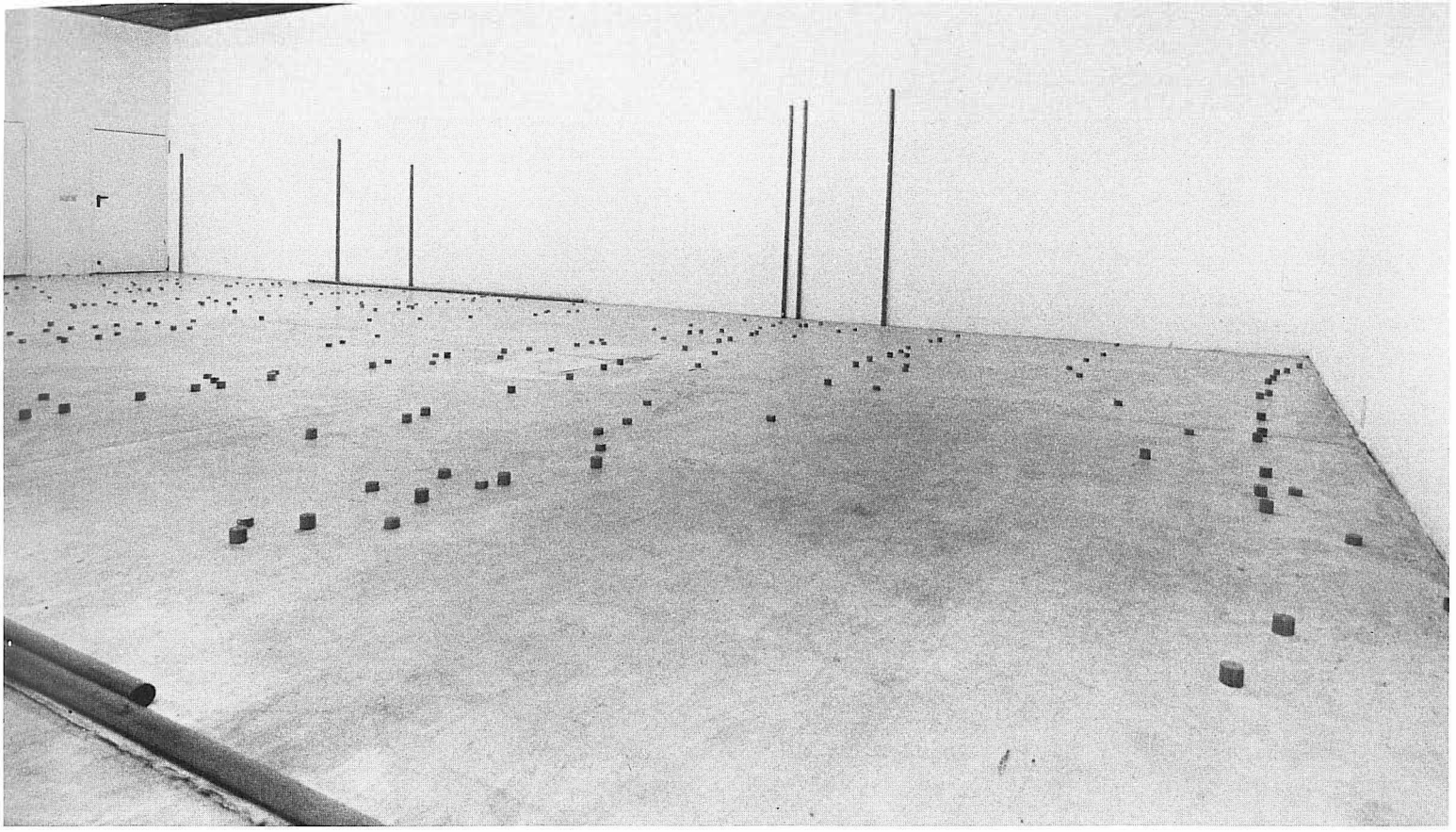
Unequal lengths cut circular (walked end-over-end in their own paths) (ends touch; ends cut), 1972–1973

Ballpoint pen, pencil on paper
11 × 14″
Ink, pencil on paper
8½ × 11″

problems in his work, Le Va made a series of drawings based upon the positions of ball bearings on a flat surface the same size as the paper he drew on. He constructed a frame lined in felt, with an edge to hold the ball bearings in position. He took 100 of them and rolled his hand across them ten different times; ten drawings indicated the ten configurations which resulted. This work was an attempt to freeze an instantaneous event which could not otherwise be visually fixed. In these drawings, as in the felt pieces, time was treated as transitory, random instants in the process of rolling the ball bearings under the artist's hand. There was no way of anticipating the results, therefore no opportunity for esthetic decisions. The position of the ball bearings was transferred to the paper as it appeared.

In *Card Shuffle*, a series of fourteen drawings from the same period, paper cards were numbered and shuffled, dealt and discarded, but marked with their order of appearance through seven dealings. Black and yellow numbers and lines indicated the left or right hand sides as the cards were dealt. For another drawing utilizing shuffled cards, numbers were recorded right side up or upside down, depending upon how the cards were turned up, and thus included for the first time the position of the artist in the drawing process. For Le Va, these two groups of drawings were "researches," and their purpose was to explore a variety of means of dealing with time and location,

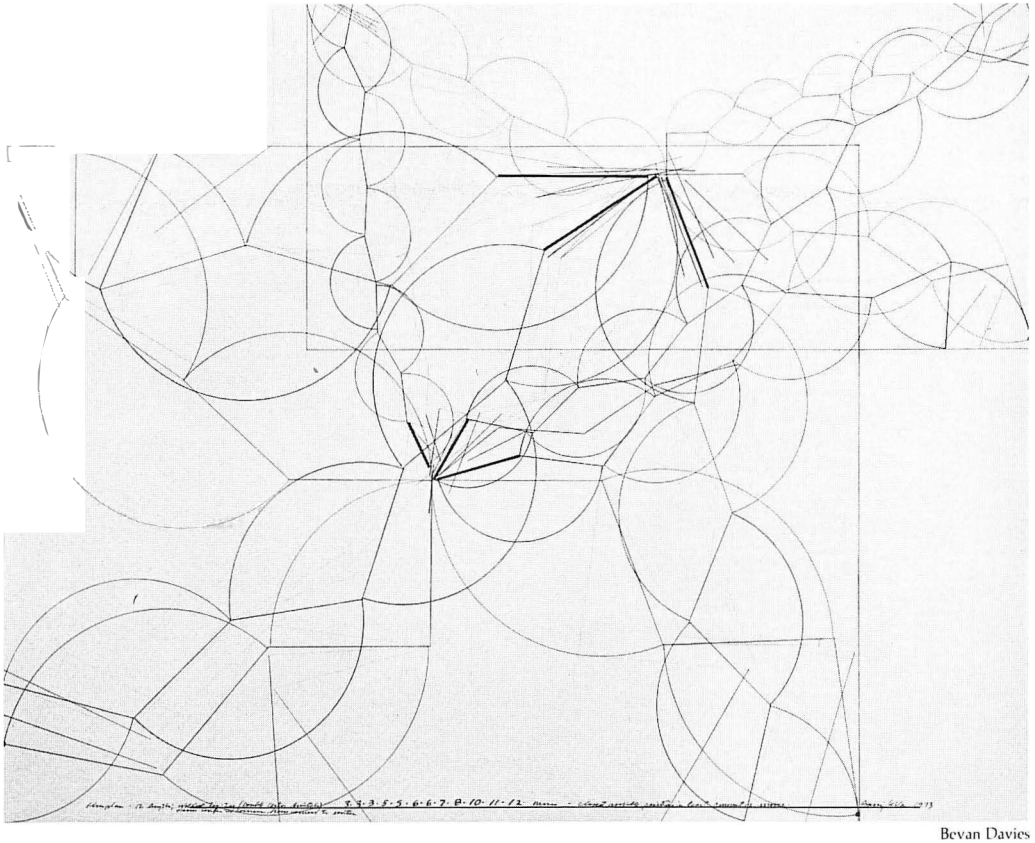
Equal Wall Base Divisions Crossed: 4 Phases (walked zig-zag; ends touch, ends cut) 1973
Wood
40 × 90'
Installation at Galerie Rudolf Zwirner, Cologne, West Germany



randomness and position, as a result of modest, small-scale gestures or activities. In *Card Shuffle,* the numbers, according to Le Va, record their own history in time and location, rather than in space, as was the case for the felt pieces. Thus, the artist's concerns could be isolated and explored away from a specific architectural space and therefore removed from questions of scale and the physical participation of the audience.

After the felt drawings, which describe one possible deployment of the elements, and the blown chalk drawings, which indicate the original shape (partly inside and partly outside the room) the chalk layer is a section of, the drawings become more specifically diagrammatic, resembling floor

Double Center Exchange, 12 lengths: walked zig-zag, 1973
Ink on paper
42 × 54"
Collection of Paul Walter, New York, New York



Bevan Davies

plans or notational systems used in dance, music, and the sciences. Between 1970 and 1971 a series of diagrammatic drawings on green paper concerned possible, not necessarily actual, installations. The drawings then went through an evolution similar to that of the pieces themselves. Becoming impatient with their small size, Le Va pushed them into a large scale around 1973—often as large as 15 feet long—accentuating the problems he was having in the installations themselves. The difficulties experienced in two dimensions were very much the same as those experienced in three. Since Le Va was unable to execute the very large-scale pieces due to unavailability of space, the drawings played an increasingly important role. Wanting to give himself "something interesting to look at," he began erasing lines in the drawings, leaving, as in the pieces themselves, only visual clues. "Once I erased the lines," he said, "it became just as difficult for me as for someone else to understand."

In modern physics, the ideal instrument for picturing the interactions between various atomic particles is the diagram. Diagrams have the capability of visually rendering what cannot be seen, imagined or intuited; they are two-dimensional images which can stand for four-dimensional space-time events. They can describe not only relations between things, but also express development or transformation itself.[31] The diagram, then, is an ideal mode for Le Va, since relation, development, and transformation are crucial issues in his work.

In all of his works, Le Va attempts to bring into play physical aspects of the process of vision that cannot be grasped, because they exist in a four-dimensional space-time continuum which cannot be understood intuitively. Three-quarters of everything Le Va does exists outside the visual domain, in the realm of ideas or concepts about the physical nature of the world. Le Va attempts to chart and make tangible *transition* itself, which explains why his concern with random distribution evolved first into a concern with perceived configurations and projections, and then into temporal concerns, making space and

Either, or #II . . . Centers and Segments (exact location; switch), 1974
Ink on paper
42 × 126″
Collection of Fredericka Hunter, Houston, Texas

Proportional Switch: Locations and Sides Doubled, Crossed and Scaled Down, 1974
Ink on paper
42 × 168″
Drawing installation at Texas Gallery, Houston, Texas

time indistinguishable. It is not surprising, then, that Le Va's drawings have become increasingly diagrammatic, to the extent that they are no longer "drawings" in the traditional sense of the word, but bear more resemblance to other notational systems. Even the early drawings, like the felt or ball bearing distributions, are indications of a potential visual event. Like a space-time diagram, which can be drawn in association with a definite mathematical expression to provide scientists with *the probability for the depicted process to occur*,[32] Le Va's drawings are the means of expressing the probability for a visual event to occur.

While the drawings, especially the recent ones, resemble architectural plans and elevations, they are also similar in feeling to Feynman diagrams,[33] which picture the creation and destruction of subatomic particles in terms of their dynamic patterns of energy. Feynman diagrams, the musical notation systems of John Cage, which provide probabilities and possibilities for musical activity within a given temporal and spatial setting, and Labanotation, used in choreography, all bear a rather startling similarity to Le Va's drawings done between 1973 and 1975; this is especially true of those done on green paper for the *Circle* and *Walking Stick* series.[34] Rudolf Laban's system has been described as follows:

> An impressive scheme of analysis and description, it refutes the common belief that continuous complex motion is too recalcitrant a subject-matter for notational articulation. . . . Indeed, the development of Laban's language offers us an elaborate and intriguing example of the process that has come to be called "concept formation."[35]

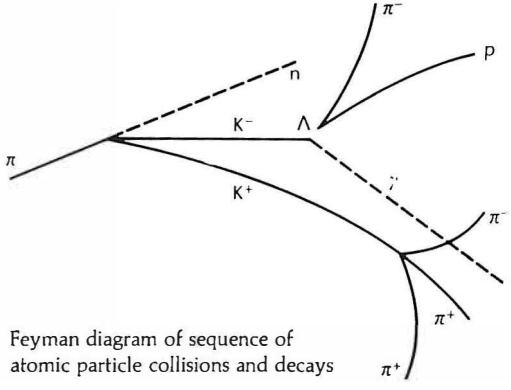
Laban's system, a notation for human movement in general, was developed and extended to provide a means of classification and analysis for all human physical activities.[36] As such, it is not simply a two-dimensional tool for the replication of movement patterns, but a diagrammatic model for thinking about one essential aspect of life and behavior. The notion of "concept formation" seems equally applicable to Le Va's drawings, which he says are

> diagrammatic rather than the absolute end result. They can be enlarged and expanded upon without changing what the work is about. Diagrams are flat, but the only thing that interests me about them is when their content is three-dimensional. I like diagrams about mental processes.

Space-time diagrams, which most resemble Le Va's *Accumulated Vision* drawings from about 1975 on, are seen

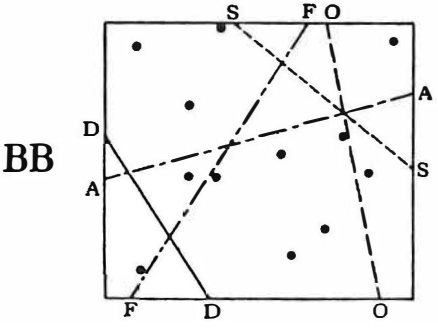
> not as chronological records of the paths of particles through time, but rather as four dimensional patterns in space-time representing a network of interrelated events which does not have any definite direction of time attached to it. Since all particles can move forwards and backwards in time, just as they can move left and right in space, it does not make sense to impose a one-way flow of time on the diagrams. They are simply four dimensional maps traced out in space-time in such a way that we cannot speak of any temporal sequence.[37]

Because the *Accumulated Vision* pieces similarly involve multiple, synchronous, interwoven events in space-time, they are also not linear or sequential. The *Accumulated Vision* drawings and installations utilize addi-



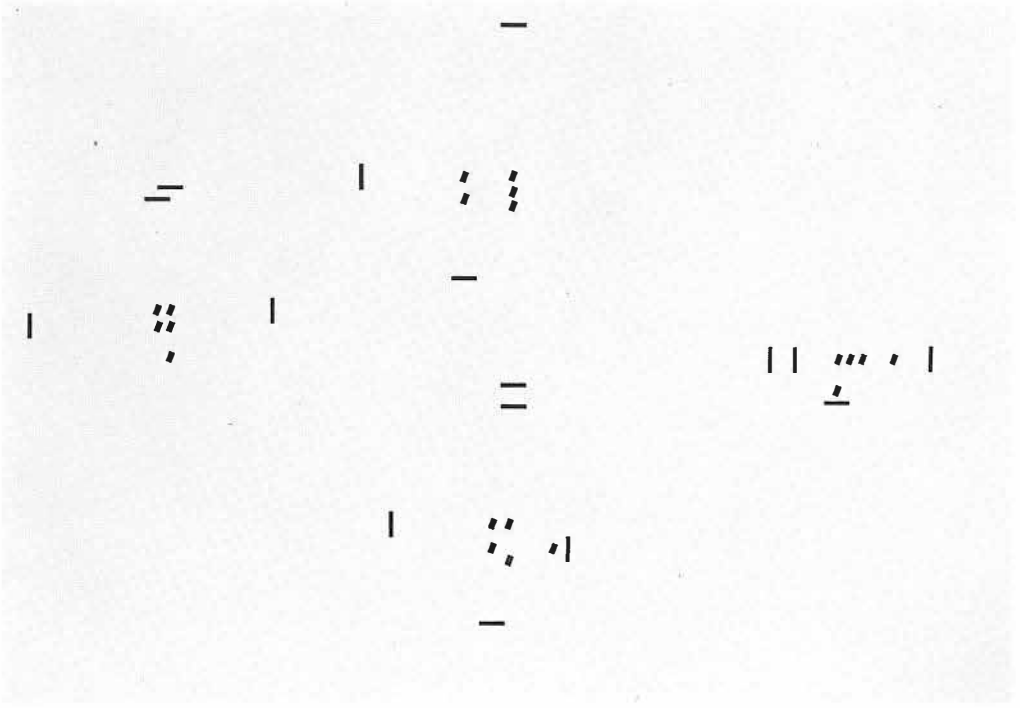
Feyman diagram of sequence of atomic particle collisions and decays

John Cage: score



Centerpoints and Lengths (through points of tangency): 4 areas separately overlaid (each area comprised of 5 circular areas tangent to and inscribed within each other), 1974

Ink on green paper
42 × 60"



tional coordinates which can also refer spatially to occurrences outside the linear time sense, and are therefore more difficult to understand or apprehend intuitively because of the very nature of the four-dimensional continuum which is established.

Le Va began as an architectural student, and the evolution of his work from early topological works, concerned with the surface of a space rather than with its volume, to the recent installations involving complex space-time problems, parallels the hierarchic development of these structures in recent architectural theory.[38] Similarly, recent developments and changes in Le Va's thinking have given his work a richness and multiplicity, with implications beyond itself. Although generally speaking, we only perceive what we expect to see,[39] Le Va's work asks us to perceive what we do *not* expect to see, providing only clues, inviting the act of perception to be not only visual, but literally physical and participatory. So too does architectural theory note that, far beyond consisting of spaces in which activities take place, architecture itself *participates* in our activities: "we walk *on* the floor, we close doors to be alone, and we open windows for ventilation."[40]

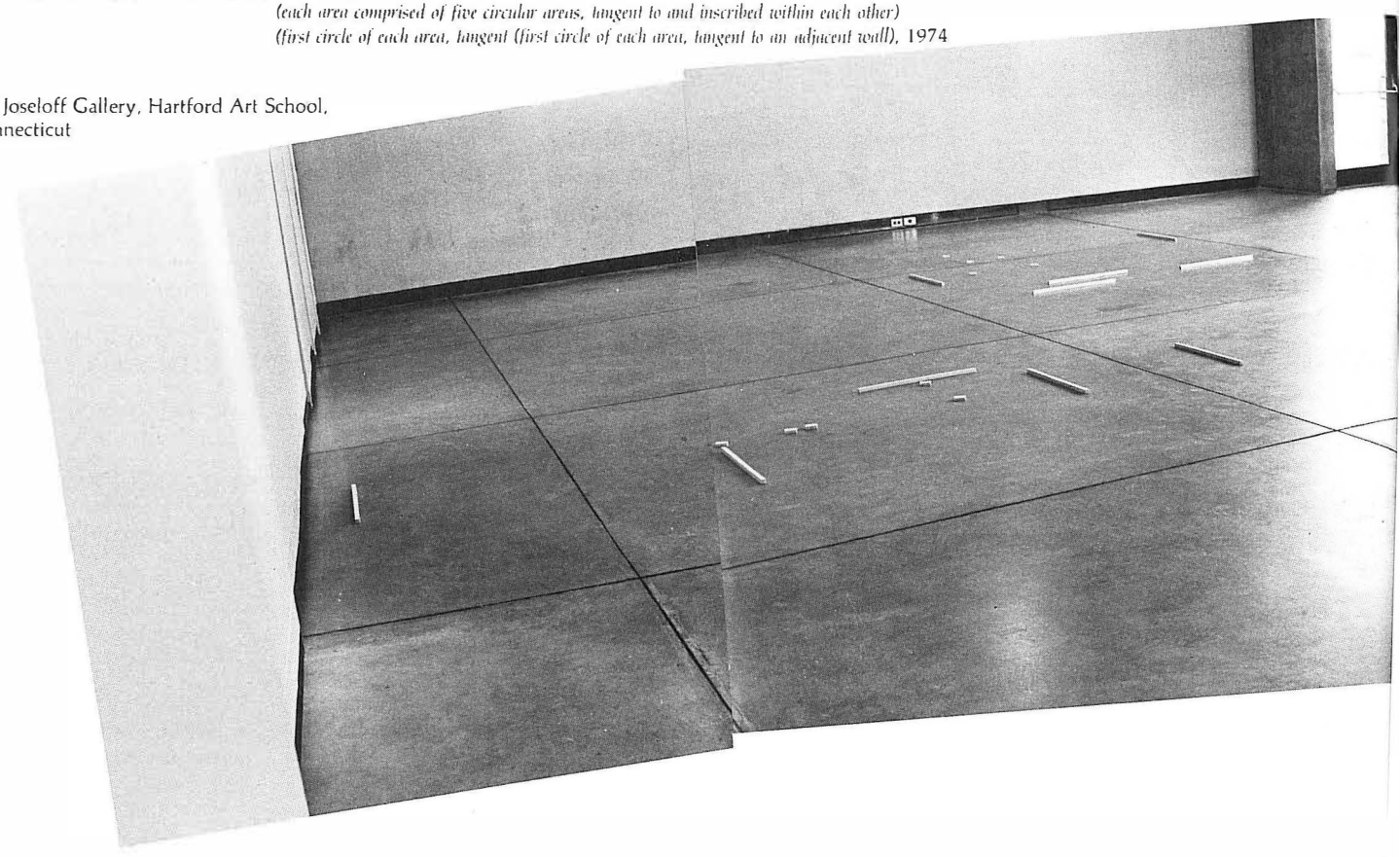
Moving among the elements of Le Va's installations is like moving in any architectural space; a change of behavior takes place as shifting viewpoints are demanded in order to make the whole intelligible.[41] In Le Va's work, as in the organization of all spatial structures,

> a complex architectural organism can only be experienced through a movement where the succession of perceptions becomes organized mentally into a total experience. In this case the perception does not only consist in the visual impression at any single moment, but is determined by our *knowledge* in the presence of certain forms.[42]

And yet for all the development of spatial concerns in Le Va's work, they are in fact inseparable from the temporal dimension. Though time is less readily definable than space, it is more conceivable as a realm unto itself. There is no spatial equivalent to the purely temporal world of the mind and of individual human experience. Time is perceived as more immediate and primary than space.[43] And because time is so subjective, it is always measured as a process; otherwise it would be perceived in spatial terms, which it is not.

Centerpoints and Lengths (through points of tangency) 4 areas separately overlaid
(each area comprised of five circular areas, tangent to and inscribed within each other)
(first circle of each area, tangent (first circle of each area, tangent to an adjacent wall), 1974

Wood
45 × 55'
Installation at Joseloff Gallery, Hartford Art School,
Hartford, Connecticut



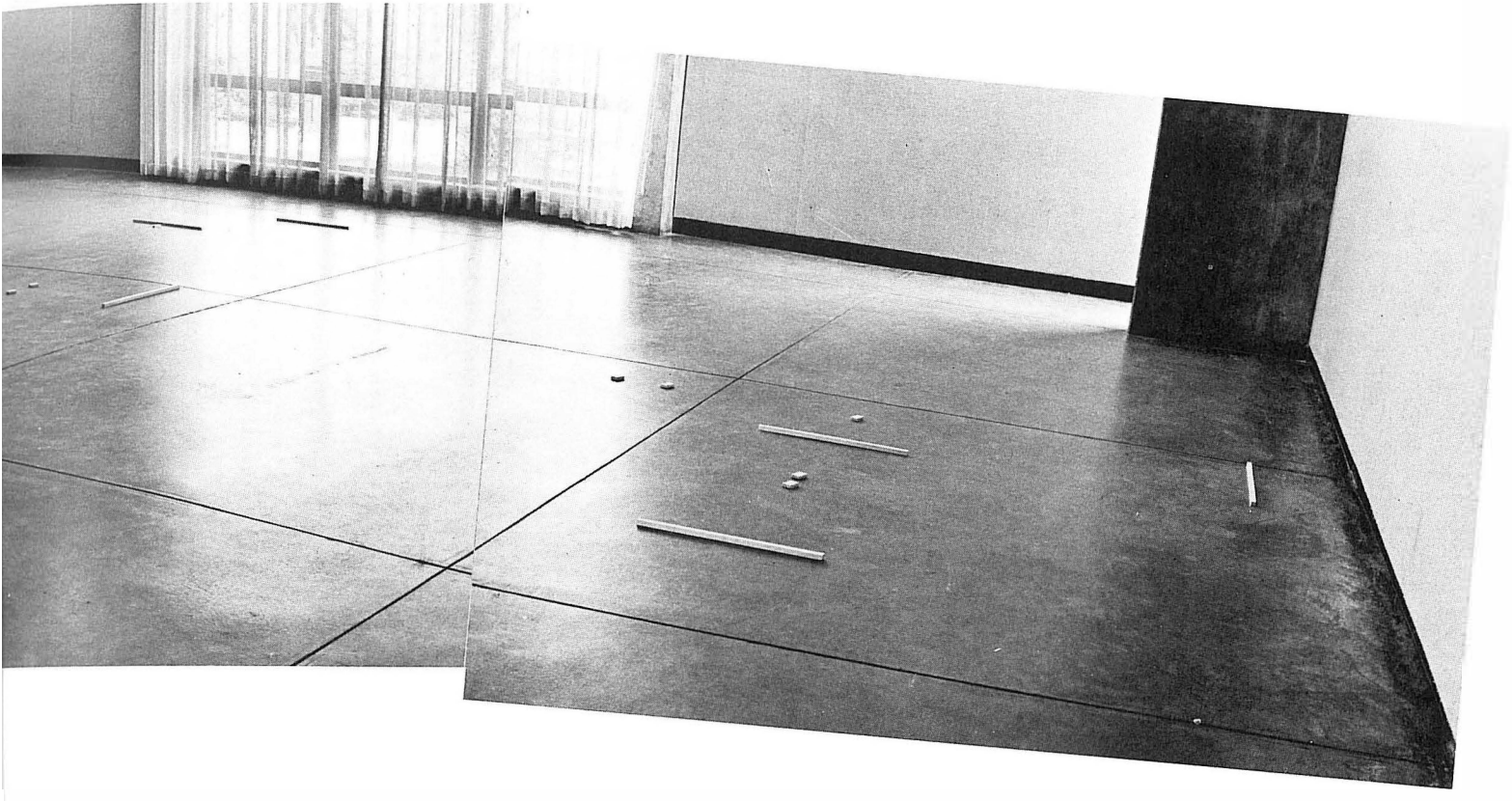
The temporal dimension in Le Va's work is expressed in several different ways. In the felt pieces, the presentation of materials as the residue of an activity suspended the flow of time, providing a sense of transition, of something "waiting" (to be used, for instance). The thrown red and gray brick piece, with its different colored marks on the walls, illustrated a theory of time based on a simple procedure:

> We throw a stone from A to B. If we mark the stone with a piece of chalk at A, it will carry the same mark when it arrives at B (event E^2). If we mark the stone only on its arrival at B, then the stone leaving A (event E^1) has no mark.[44]

Temporal order is sequence, the ceaseless flow of events.[45] The evolution of temporal understanding in human beings is expressed in the act of reconstructing a narrative, or series of events, events that must be projected both forward and backward in time in order for the succession to be apprehendible: that is, one must have the ability to reverse the process of thought,[46] precisely the process demanded by Le Va's installations from the *Circle Series* to the present.

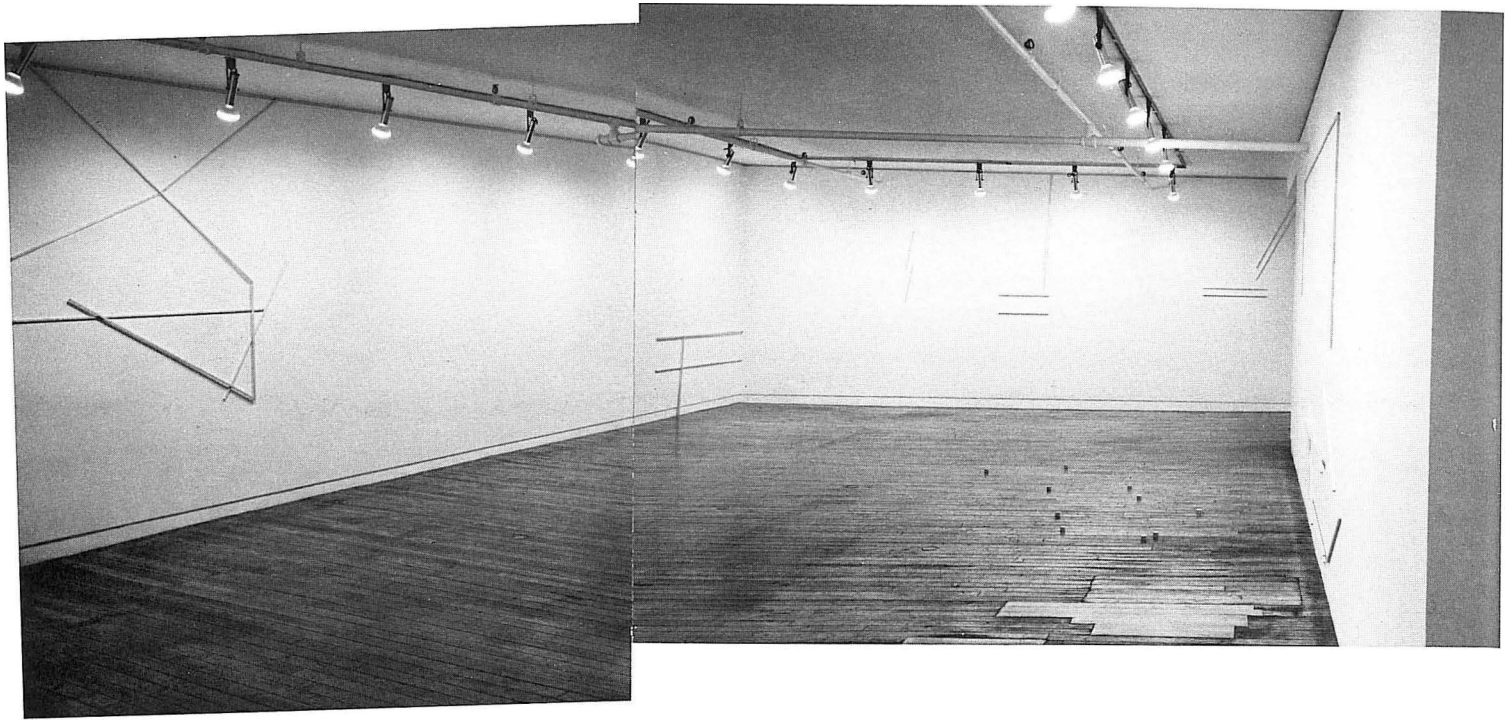
The construction or reconstruction of any sequence of events

> passes through identical phases in the case of both psychological and also physical time; it starts out by being intuitive or non-operational, simply substituting more or less correct or fabulated representations for perceptions, and ends up by being operational or logical



in that it involves reasoned seriations.[47] Thus, psychological time and physical time can be reduced to the coordination of motions and velocities, or to actions and the rate at which they are performed. Furthermore, the subjective understanding of time is such that when a rapid action is performed we experience time as "shorter," and a slow or deaccelerated action makes us experience time as "longer."[48] Using varying lengths of doweling in the *Walking Stick* pieces and *Accumulated Vision Series*, and depending upon a succession of movements in the former and a change of vantage point in the latter, Le Va has made subjective and psychological temporal states a substantive element in his work. Because the time associated with different feelings, such as boredom or excitement, can be attributed directly to the speed of actions undertaken or experienced by someone, it is thought that the ego itself can be considered as a system of actions undertaken at different speeds, involving velocity and distance as methods of measurement.[49]

In human development, the grasp of time is initially spatialized; only later does it become more abstract. This is paralleled by the development of Le Va's work, in which the most recent pieces so actively involve the spectator in a complex series of intellectual and physical co-ordinations that they not only change behavior, but enlarge the viewer's sense of reality. These works directly address the viewer's "ego" by encouraging reconstruction of those very same



actions undertaken at different velocities, distances and vantage points of which the ego itself is constituted.

Le Va disavows any special interest in simple geometry despite the fact that so many of his drawings and installations hint at an underlying geometric structure. This is because geometrical relationships are spatial and not temporal. They are changes of position or placement, whereas

> time is the co-ordination of motions at different velocities—motions of external objects in the case of physical time, and of the subject in the case of psychological time. When we say motions, we are thinking of real motions, and not of the displacements or ideal movements of geometry.[50]

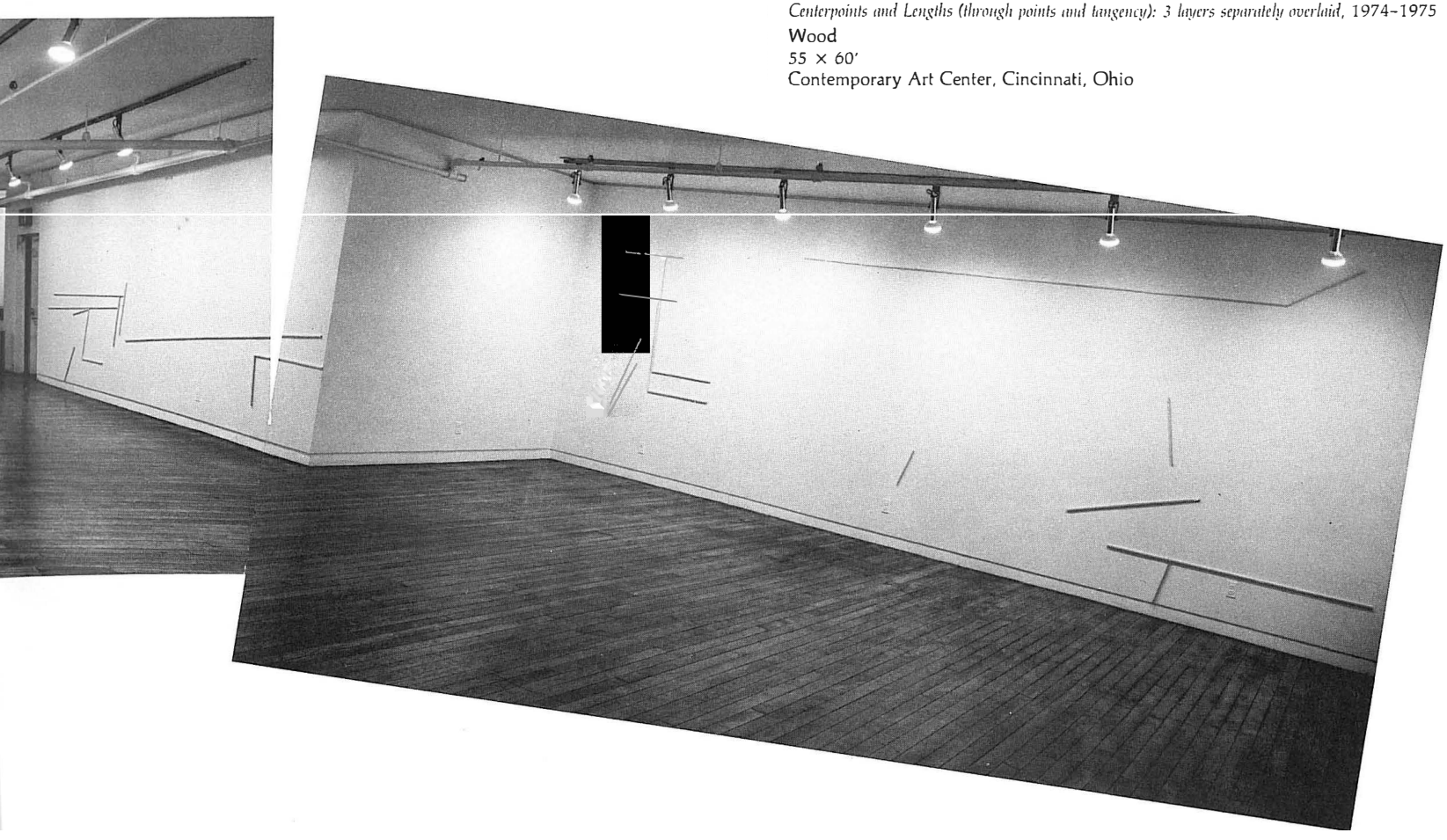
Le Va's work is predicated upon "real" rather than ideal motion also, that is, upon an event sequence rather than simple displacement; its content can be said to center on time. Because we cannot *see* time—unlike space—we are not used to taking it into account as a sensory factor when looking at works of art. All we can perceive of time itself is in terms of events, that is, "motions, actions, speeds, and their results. Thus temporal successions are determined by the order of events, and durations either by the motions, i.e. by distances covered at given velocities, or else by actions, i.e. the work done at a given rate."[51] Time in Le Va's work is structured according to Kant's description:

> Time is not a concept, i.e., a class of objects, but a unique schema, common to all objects, or if you like, a formal object or structure.[52]

So too for Le Va, time is not a concept, but an integral part of the making and the experience of the work, and it is the very act of understanding time, so to speak, that occurs as the viewer attempts to organize the few simple elements presented by Le Va's complex structure, and to understand how and why those elements came to be where they are.

The pieces are emotionally and intellectually affective because they also involve psychological time, which cannot be separated from physical time. Psychological time is not simply intuitive, for

> the evaluation of "lived" duration calls



Centerpoints and Lengths (through points and tangency): 3 layers separately overlaid, 1974–1975
Wood
55 × 60'
Contemporary Art Center, Cincinnati, Ohio

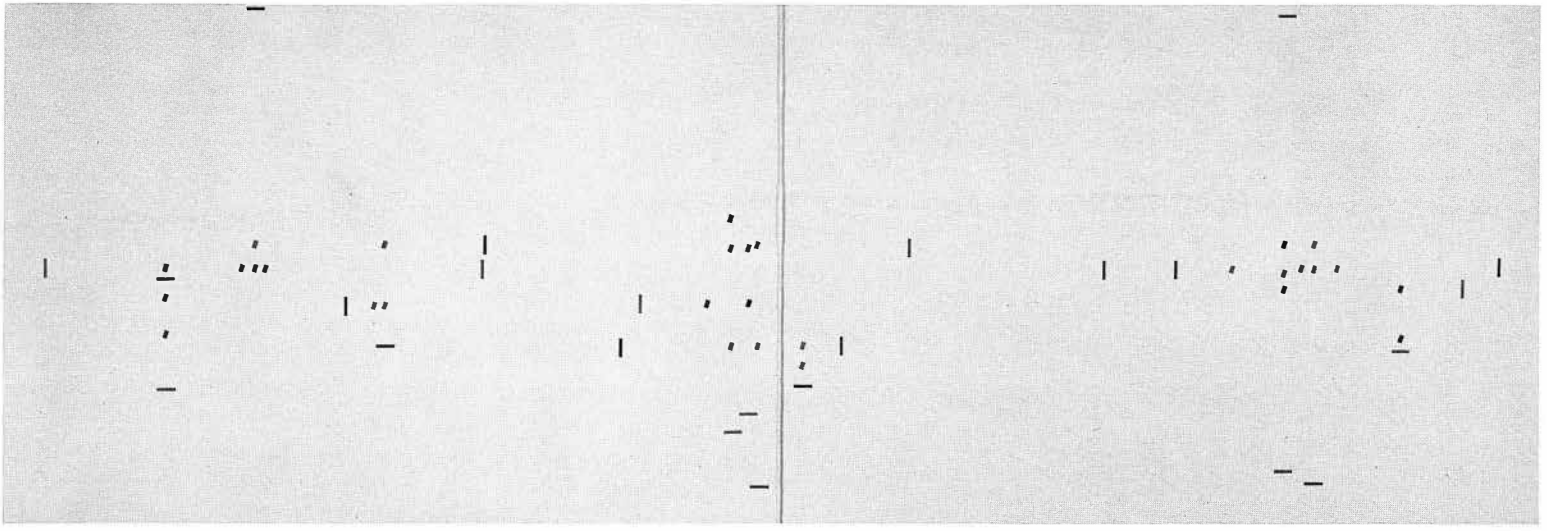
> for a host of conscious or unconsious comparisons that lead to a continuous progress from the level of perceptive or intuitive regulations to that of operational grouping.[53]

As we engage in the process of reconstruction with Le Va's work, we are experiencing such "lived durations," which are not simply successions or intervals but are what Henri Bergson called "the very stuff of reality."[54] Inner, subjective time, since it is not spatialized or measurable, is experienced qualitatively. Thus, says Bergson, "time is creation, or it is nothing at all."[55]

The temporal aspect of Le Va's work makes it art in the sense that it attempts to render private experience public (both for the viewer and for the artist as well), but not in a purely expressive mode. Jean Piaget's description of the nature of time seems to express what, in fact, happens in Le Va's recent work:

> [We can point] to the common nature of temporal operations in all spheres, and to the close relationship between psychological and physical time: both are coordinations of motions with different velocities and both involve the same "groupings." This is to be expected, since both are derived from practical or sensory-motor time which, in its turn, is based on objective relations and on personal actions. As the external universe is

Centerpoints and Lengths (through points of tangency): 6 areas separately overlaid into 3 equal spaces, each area comprised of 5 circles tangent to and inscribed within each other, 1974
Ink on paper
42" × 10'6"
Sonnabend Collection, New York, New York



Bevan Davies

gradually differentiated from the inner universe, so objects and actions become differentiated as well, but remain closely interrelated.[56]

Le Va's pieces also necessitate the recreation of a succession of psychological phenomena on the part of the viewer, phenomena which "can only be grasped by an observer who goes beyond them and so resurrects a physical time that is no longer."[57]

This resurrection or reconstruction of time is most evident in the work preceding the *Accumulated Vision Series*, because after 1975 the viewer no longer must reconstruct a succession of events in time and space, but must comprehend points of view, distances, projected boundaries, and angles. In the later pieces a second, different kind of time is at issue—that of parallel intervals occurring at different points in space rather than successive intervals occurring at the same point in space.[58] Le Va's most recent pieces, especially an installation done in November, 1978 at the Tampa Bay Art Center, are predicated on both kinds of simultaneity, utilizing visual projections of lengths in the past, present, and/or future. The same wooden length appears in three situations, A, B, and C, in combination or alone, sometimes indicating simultaneity of time, not location, or the simultaneity of location at different instants in time. The end result is four locations, or four pieces of wood on the floor, in which A is future, B past, and C present; three lengths on the walls indicate their original configurations as they were projected from a vantage point outside the room at the moment they met the barrier of the wall.

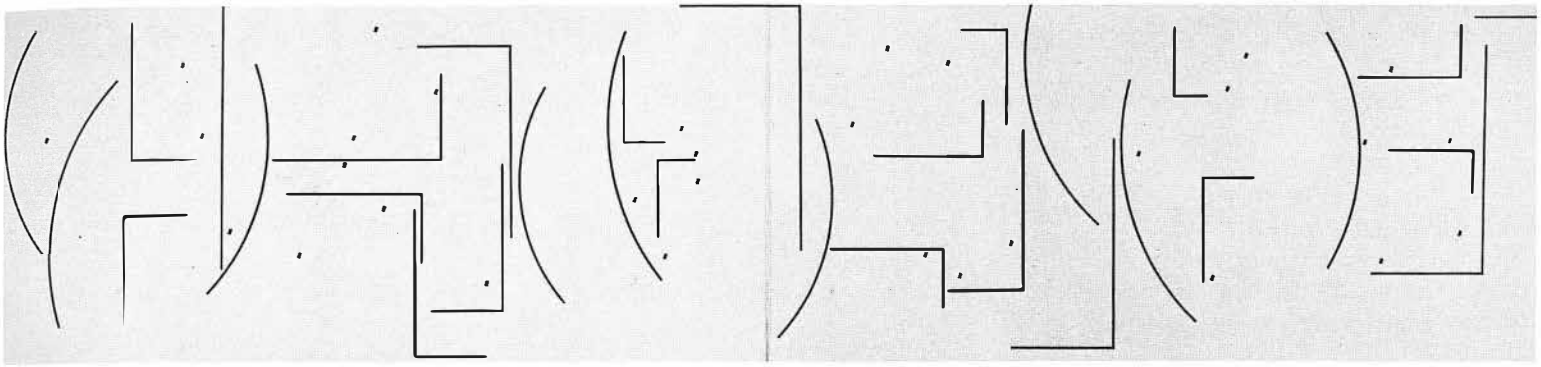
III

We can say . . . that both the theory of relativity and modern art have a common point of departure in the fact that phenomena do not exist in isolation, but relative to a situation.

—Christian Norberg-Schulz
Intentions in Architecture

Classical physics assumed that space and time were separate entities, that a three-

Area Switch: separated sections; sectioned into separates, 1974
Ink on paper
42" × 15"



Bevan Davies

dimensional space existed independent of the material objects it contained, obeying the laws of Euclidean geometry, and that time was absolute and flowed independent of the material world, at a fixed rate.[59] In modern physics, these ideas were abandoned with Einstein's discovery that all space and time measurements are relative, not only to each other, but to the observer as well. "Relativity theory implies that space and time co-ordinates are only the elements of a language that is used by an observer to describe [our] environment."[60] Because both space and time order things and events in our environments and our lives, they are of primary importance and crucial to our understanding of "reality," that is, essential to our attempt to understand ourselves and our world. Relativity theory shows that space is not three-dimensional and time does not exist outside of space, but that the two form a four-dimensional continuum, of which we can have no direct sensory experience. When space and time are translated from one frame of reference to another, they are called "transformations."[61] Le Va has stressed, both in his own descriptions of his work and ideas and through the work itself that his central themes are fluctuation, transformation, instability; that time and location are his major concerns; that the audience (i.e. the observer or viewer) is essential to the work, activating or engaging in a reciprocal relationship with it; and that he is more interested in what is left out, or not seen, that in what is visually provided in a given piece. His concern with "events," (a word found in the drawings and titles of his installations throughout his career) rather than "things" and his desire that the work provide "a model for dialog" have striking parallels with the theoretical underpinnings of modern physics.

For instance, the large felt distributions, containing many small particles, involved a constant interchange between the felt and the floor on which it was scattered. Not only was this the result of an activity in space, but it appeared to be an active field, in which neither material nor ground predominated. So too, in general relativity theory, are field and structure, matter and space, inseparable and interdependent parts of a single whole.[62] Like quantum fields, which are characterized by a total inability to "keep still," Le Va's distribution pieces are in constant visual flux. In a glass piece (one of the *Layered Pattern Acts* shown at Documenta, Kassel, Germany, in 1972) consisting of sheets of broken glass dropped in consecutive layers, field and material are so inseparable that they are seen as all field.

Modern physics has shown that the presence of matter is merely a disturbance of the perfect state of the field at a given place[63]—or, to put it another way, "we may

Centerpoints and Lengths (through points of tangency) 5 areas in 2 areas: Separated and partially included Separated and partially excluded, 1975

Wood
Dimension variable
Installation at Bykert Gallery, New York, New York

Nathan Rabin

regard matter as being constituted by the regions of space in which the field is extremely intense."[64] When Le Va talks about the "ground" in the felt and glass pieces as the area of most concentrated energy, the nexus of an event's occurrence (throwing, breaking, scattering), the description—and indeed, the look of the pieces themselves—calls to mind the contemporary description of the activity of subatomic particles. Le Va's emphasis on the inseparableness of activity and location, event and site, and the fact that he makes installations entirely integral to the space they are to be situated in, have an analog in modern physics: "At the macroscopic level . . . material objects are not distinct entities, but are inseparably linked to their environment; . . . their properties can only be understood in terms of their interactions with the rest of the world."[65]

In the *Circle Pieces* and *Walking Stick Series*, with their lengths and segments of wooden dowling or sticks marking centerpoints, tangents, points of movement and rest, one finds still another analogy to modern science. Le Va's configurations of wooden elements can be considered as similar in their mode of employ to atomic particles. It is curious to find that in modern physics as in Le Va's pieces

> the particle constitutes an intermediate system connecting the processes at A and B. It exists and has meaning only in this context; not as an isolated entity, but as an interconnection between the processes of preparation and measurement. The properties of the particle cannot be defined independently of these processes. If the preparation of measurement is modified, the properties of the particle will change too.[66]

Thus we return once again to the importance of the observer, since it is the viewer who must provide, in all of Le Va's work, the information which is absent in the physical aspects of each piece. As in physics, the properties of the phenomena being observed will change according to the activities of the observer. If Le Va's work is indeed "a model for dialog," that is, an instrument for thought, it shares with scientific models the characteristic of being "a structure within which various skills are tested, relationships explored, and initiative rewarded."[67] Such a model, in art as well as other fields, has the potential of changing the viewer's perception of reality, allowing us to "see" multidimensionally, to see on either side of the phenomenal world, so to speak.[68]

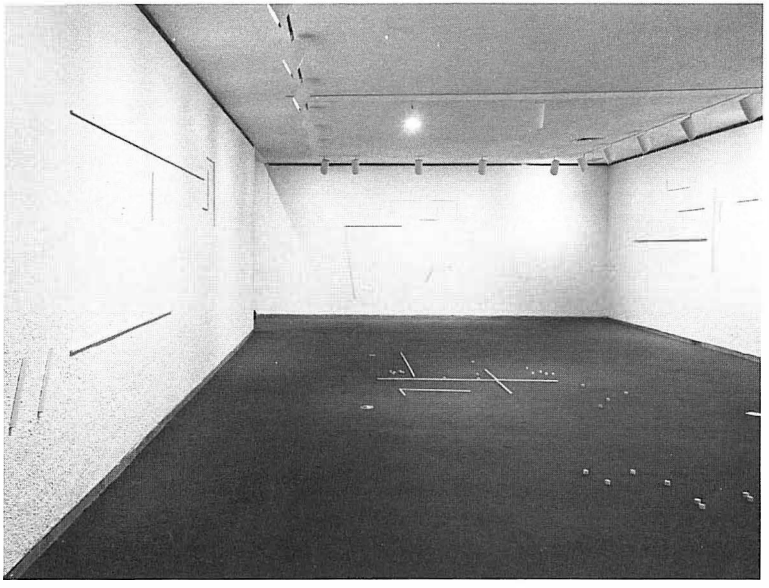
A crucial feature of atomic physics is that

> the human observer is not only necessary to observe the properties of an object, but is necessary even to define

Accumulated Vision (separated stages): Length Ratios
Length end points (of three or four individual configurations)
Separately projected from four positions of viewing.
Each position (not necessarily stationary) is located at a specific depth below floor level and within the boundaries of the surrounding gallery walls, 1975
Wood
Dimension variable
Installation at Sonnabend Gallery, New York, New York

Bevan Davies

Accumulated Visions: Series II (I from II), 1977
Wood on floor and walls
25 × 40'
Installation at Whitney Biennial, New York, New York



Bevan Davies

these properties. In atomic physics we cannot talk about the properties of an object as such. They are only meaningful in the context of that object's interaction with the observed.[69]

Similarly, in Le Va's work there is no possibility for a detached observer. Some scientists have gone so far as to suggest that, since the observer can be seen as the most important feature of relativity theory, he or she might better be referred to as a "participator."[70] An even more advanced theory (S-Matrix) not only emphasizes events and transformations rather than structures or entities, but implies that if it is impossible to separate the observer from what is being observed, then ultimately "the structures and phenomena we observe in nature are nothing but creations of our measuring and categorizing mind."[71]

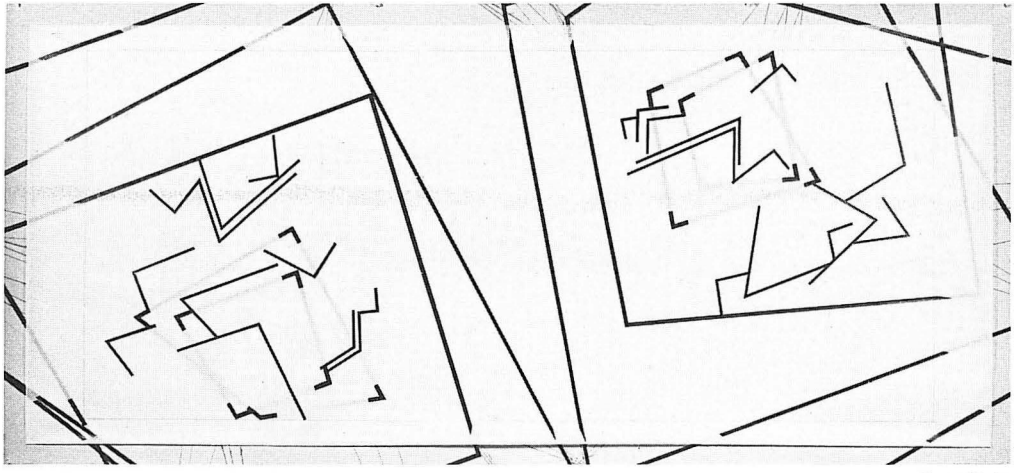
Just as in modern physics "the idea of 'basic building blocks' of matter is no longer tenable,"[72] so too Le Va has moved further and further from the idea of sculpture as shape, volume, surface, mass and material.

Knowledge can be acquired through direct sensory experience, or "pure" comprehension, which is a passive mode, or it can be acquired by ordering experience through examination and function. This is an active mode, "concerned with relationships (sorts of thing), structure (logical form), transformations (changes or distortion of the outer form while retaining the 'inner structure' or the logical form)."[73] It is this second, active mode which characterizes both Le Va's intentions and the experience of his work itself. Such work does not adhere to classical definitions, but is multilayered, combining physical, intellectual, and psychological aspects of human activity and thought.

Because Le Va's work is a "model," its material substance is not its essence. Rather, it is an example of Gödel's Proof that

something exists without necessarily

Corner Sections (of 5 four-sided boundaries) separately projected from eighteen positions of viewing, 1977
Ink and pencil on paper with tracing overlay
40 × 88"



Bevan Davies

> producing something for inspection. This statement can be interpreted on many levels. It is a necessary statement in order that we may acknowledge the elusive and insubstantial nature of our experiential universe, of our sense of reality, even of our knowledge of reality. We need this statement to believe in the validity of our reality as our current *model* of experience. It places emphasis on the reality of structure of concept rather than a dependence or necessity for confirmation.[74]

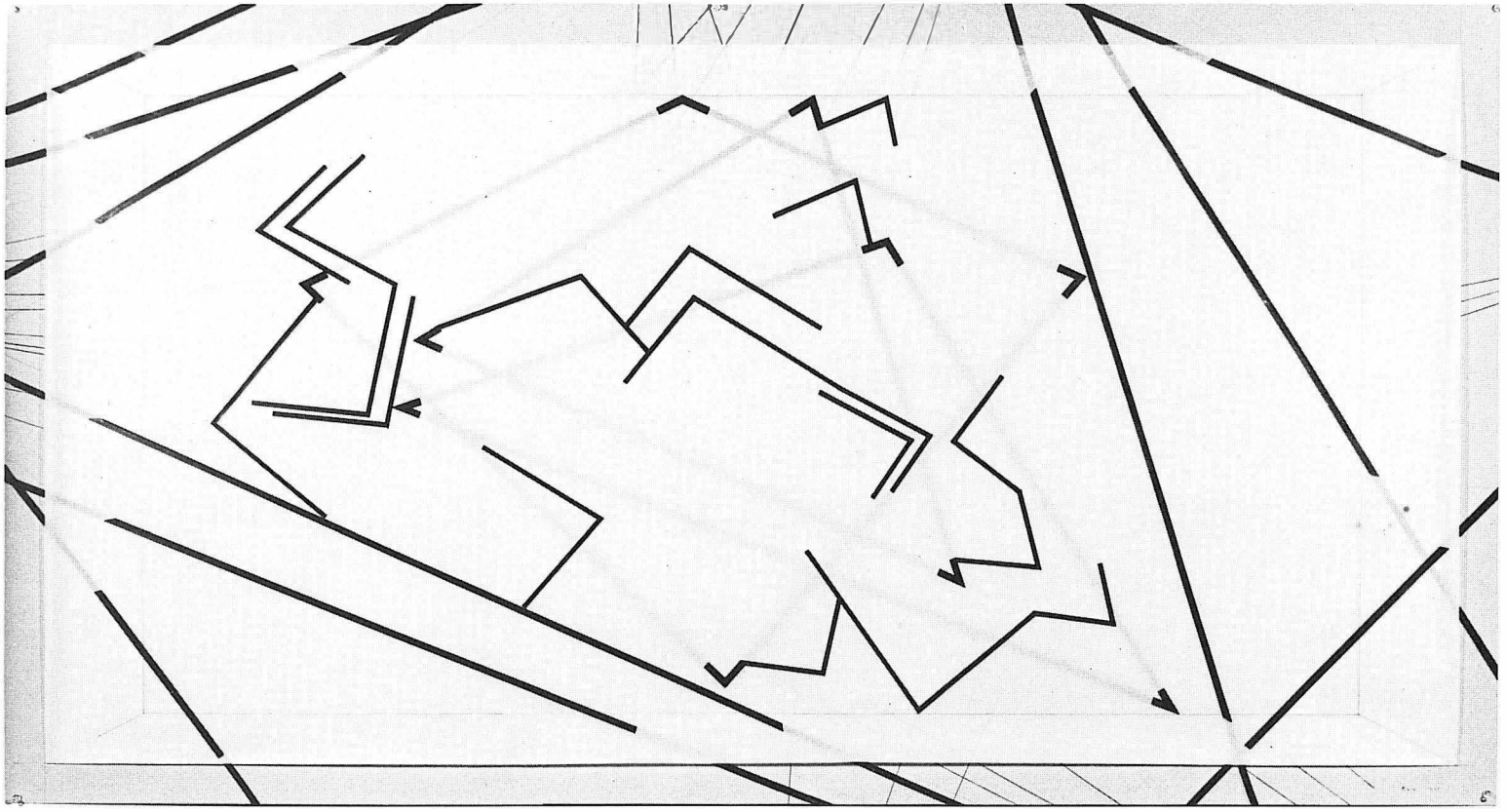
Because it is constituted of events, transformations, energies and ideas rather than objects, Le Va's work does indeed provide us with a model for dialog, for thinking, and for thinking about knowing. It, like modern physics, shows us that "phenomena can only be understood as links in a chain of processes, the end of which lies in the consciousness of the human observer."[75]

Viewing Le Va's work, the human observer is an active strategist, a "creature of imaginative committment,"[76] a real participant in the ideas generated by the work. If it can further be considered that we *are* our ideas, that we cannot exist consciously and continually separate from them, and that we normally are responding to experience, building constructs and storing data in order to glean knowledge unselfconsciously,[77] then Le Va's work, based as it is on idea rather than object, can alter reality through our experience of it.

FOOTNOTES

1. The photograph accompanied an article by Jane Livingston, entitled "Barry Le Va: Distributional Sculpture," *Artforum*, (November, 1968), pp. 51–54. Two other articles reproducing Le Va's felt pieces appeared at about this time. See Barbara Rose, "The Politics of Art, Part III," *Artforum*, vol. VII, no. 8, April 1969, and Fidel Danielli, "Some New L.A. Artists," *Artforum*, vol. VI, no. 7, March 1968.
2. All quotes by Le Va, unless otherwise noted, are taken from a series of interviews with the author in September and October, 1978.
3. Keith Albarn and Jenny Miall Smith, *Diagram, The Instrument of Thought* (London, 1977), p. 25.
4. Robert Pincus-Witten, "Barry Le Va: The Invisibility of Content," *Arts Magazine*, October, 1975, pp. 60–67. Jane Livingston's article, previously cited, also discusses Le Va's work in relationship to Jackson Pollock's paintings.
5. Albarn and Smith, *op. cit.*, p. 38.
6. "Experiment has shown that the eye cannot see normally without moving relative to what is seen; apparently, scanning is necessary for normal vision. The fixed eye is almost as blind as the innocent one." Nelson Goodman, *Languages of Art* (Indianapolis, 1976), p. 12.
7. While Le Va was not aware of it, Dennis Oppenheim's *Dead Furrow* (1967) resembles Le Va's piece although the intention of the two was very different. Oppenheim's provided a structure from which to view the surrounding landscape, making *the act of viewing* itself the content of the work. Le Va's piece expresses an ongoing concern with shifting relationships, visual ambiguities and ephemeral situations. See "Interview with Barry Le Va," *Avalanche*, Fall, 1971, pp. 64–75.
8. *Avalanche, op. cit.*, p. 71
9. *Ibid.*, p. 71
10. *Ibid.*, p. 66
11. Albarn and Smith, *op. cit.*, p. 75.
12. *Avalanche, op. cit.*, p. 67.
13. This exhibition was held from May 19, 1969–July 6, 1969, accompanied by a catalog which included essays by myself and James Monte, the organizers of the show.
14. This was the second version of the piece; the first

Corner Sections (of 1 four-sided and 2 three-sided boundaries) separately projected from ten positions of viewing, 1977
Ink and pencil on paper with tracing overlay
40 × 76"

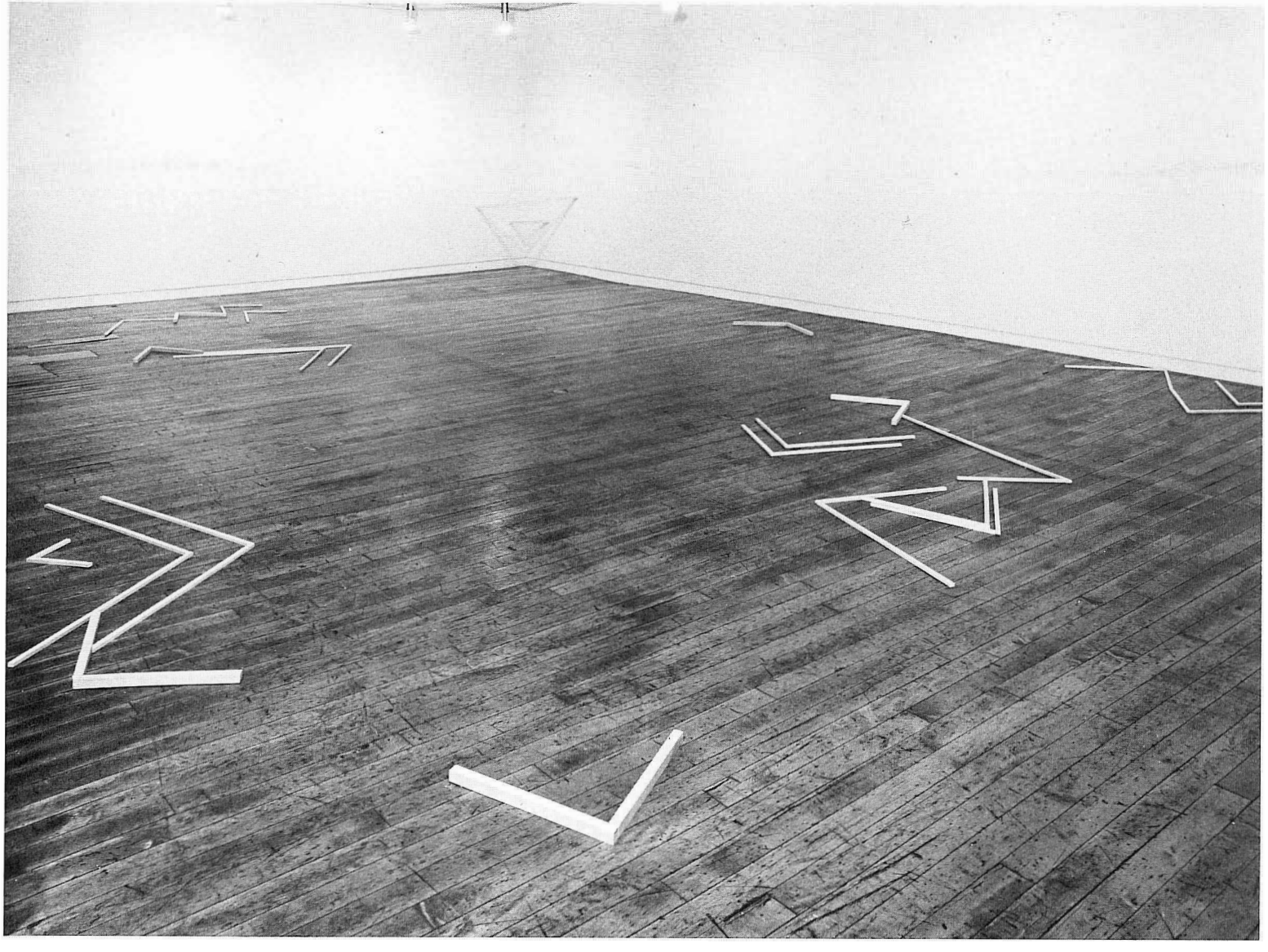


Bevan Davies

was entitled *Six Blown Lines*, and installed at Stout State University, Menomenie, Wisconsin, in 1969.
15. *Diagram*, p. 15.
16. Christian Norberg-Schulz, *Intentions in Architecture* (Massachusetts, 1965), p. 144.
17. *Diagram*, pp. 20–21.
18. *Ibid.*, p. 73.
19. *Ibid.*, p. 20.
20. From William O. Green's introduction to *Ars Criminalis* by John Strang, quoted in Ellery Queen, *The French Powder* Mystery (New York, 1969), frontispiece.
21. *Avalanche*, *op. cit.*, p. 71.
22. *Ibid.*, p. 68.
23. See Hans Reichenbach, *The Philosophy of Space and Time* (New York, 1958). Reichenbach's book is, generally, about advanced physics, but Le Va read it in 1968; in it, his underlining shows how much Reichenbach's concerns paralleled his own.
24. Reichenbach, *op. cit.*, p. 97.
25. Content is defined by Reichenbach as "the system of relations common to a given set of symbolic systems," *Ibid.*, p. 107.
26. Fritjof Capra, *The Tao of Physics* (Boulder, Colorado,

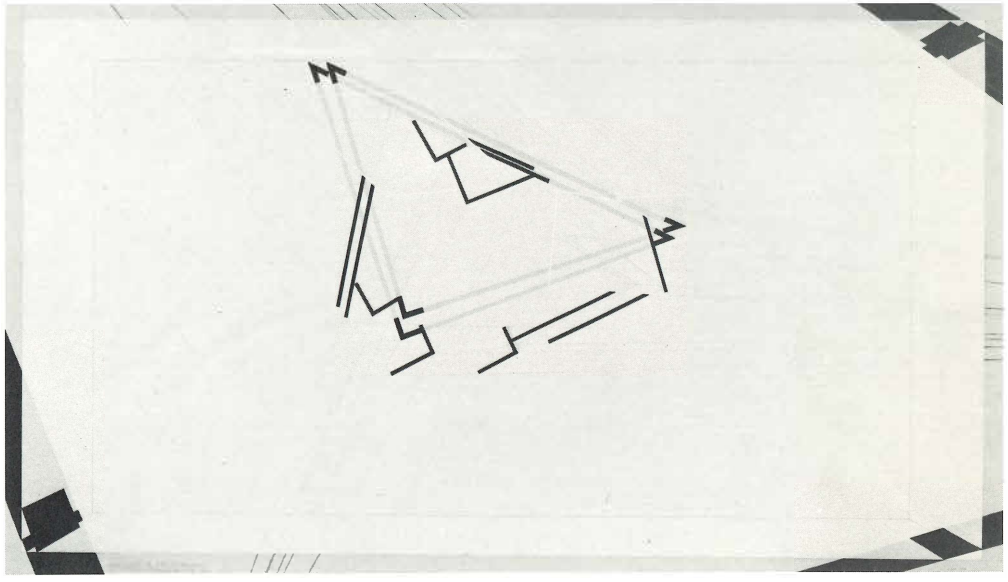
Accumulated Vision: Boundaries Designated (configurations indicated) corner sections (of 2 four-sided boundaries that cut through corners of this space where designated) separately projected. From eight positions of viewing, each position (not necessarily stationary) is located at a specific height above floor level and outside the boundaries of corner sections, 1977

Wood
Dimensions variable
Installation at Sonnabend Gallery, New York City



Corner Sections (of two triangular boundaries) separately projected (and partially blocked and omitted) from six positions of viewing, 1978

Ink and pencil on paper
40 × 70″

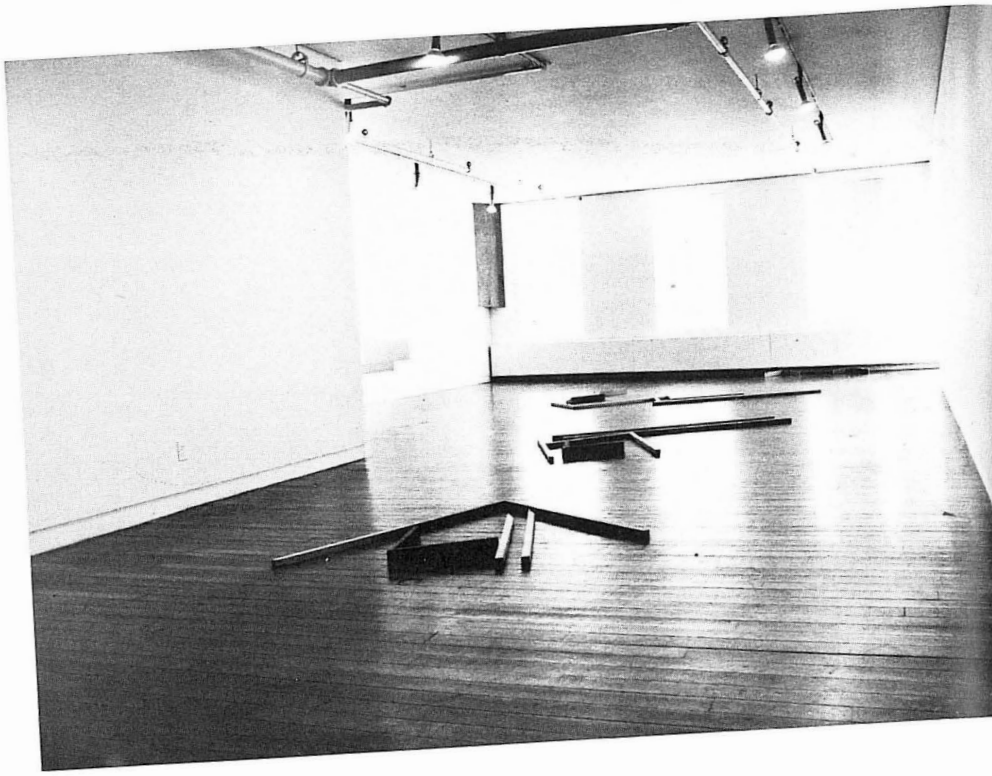


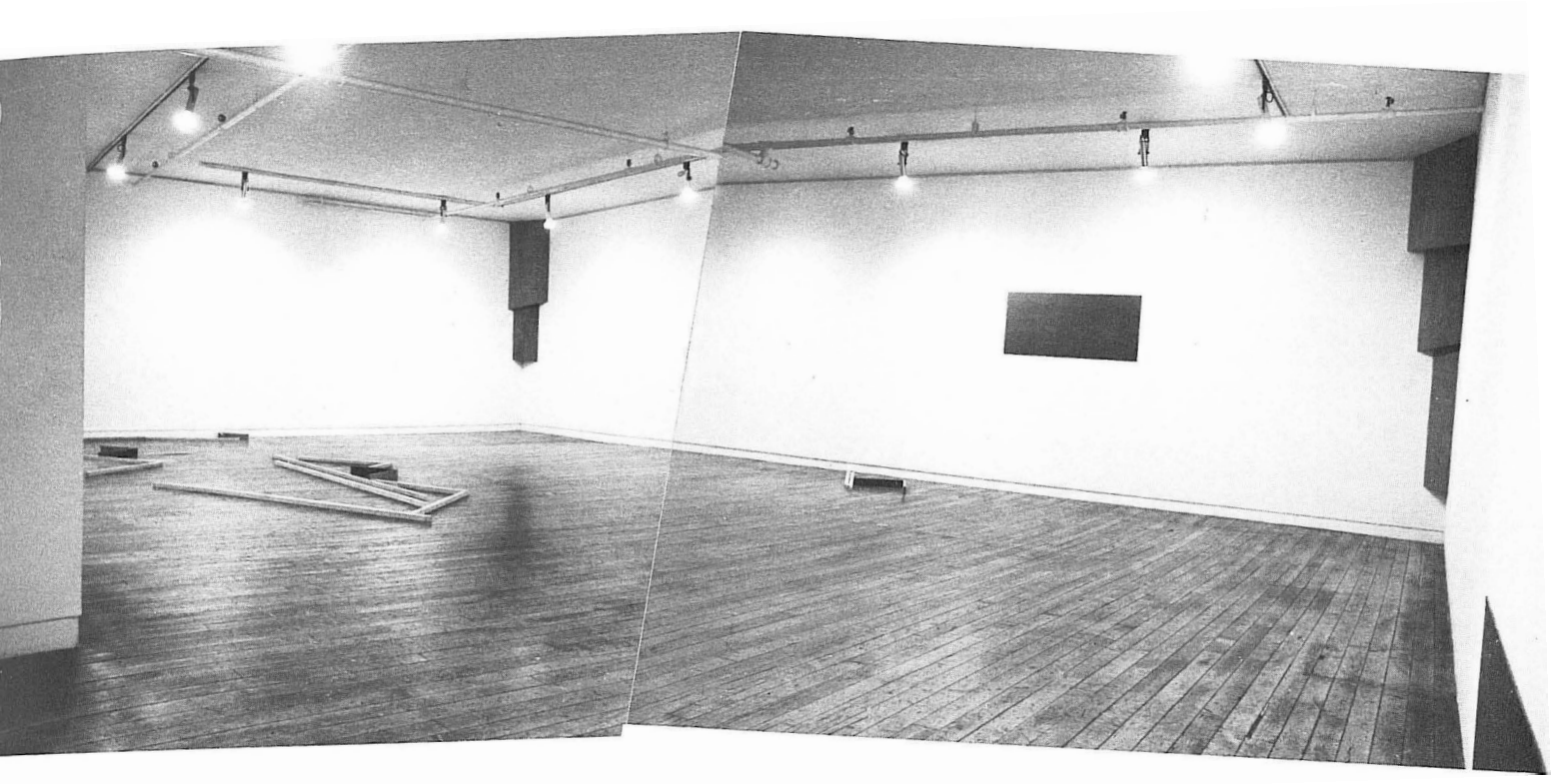
Bevan Davies

1975), p. 170.
27. *Ibid*, p. 170.
28. See Christian Norberg-Schulz, *Intentions in Architecture*, p. 148 ff. In this seminal work, the author has postulated a comprehensive method of describing our complex responses to those spaces; many of his observations relate to Le Va's work, and have helped to elucidate it for the present author.
29. *Ibid.*, pp. 144–145.
30. *Ibid*, p. 158. Norberg-Schulz says: "The main condition for the acceptance of a new style, or for the development of an existing style, is that it is connected with something known, that some of its forms are correlated with human expectations. Only in this way can it transmit information. The correlation with a system of expectations may be created through education and through becoming accustomed, but a visual relationship to known forms is usually essential.
31. Albarn and Smith, *op. cit.*, p. 69.
32. Capra, *op. cit.*, p. 180.
32. Named after Richard Feynman, who in 1949 established the correspondance between diagrams of subatomic particles and their mathematical espressions. See *The Tao of Physics*, p. 217.
34. Robert Pincus-Witten noted the similarity to dance notation as well as to time-motion studies for urban planning in his article on Le Va, *op. cit.*, p. 65.
35. Nelson Goodman, *op. cit.*, pp. 213–214.
36. *Ibid.*, pp. 217–218.
37. Capra, *op. cit.*, p. 185.
38. Norberg-Schulz, *op. cit.*, p. 160.
39. *Ibid.*, p. 196.
40. *Ibid.*, p. 168.
41. *Ibid.*, p. 197.
42. *Ibid.*, p. 198.
43. Hans Reichenbach, *op. cit.*, p. 110.
44. *Ibid.*, p. 138.
45. *Ibid.*, p. 138.
46. See Jean Piaget, *The Child's Conception of Time* (New York, 1970), orig. ed. 1946, pp. 273–274.
47. *Ibid.*, p. 271.
48. *Ibid.*, p. 276.
49. *Ibid.*, p. 276.
50. *Ibid.*, p. 279.
51. *Ibid.*, p. 293.
52. *Ibid.*, p. 300.
53. *Ibid.*, p. 301.
54. *Ibid.*, p. 302.
55. *Ibid.*, p. 302. Inner time is generally thought of as qualitative rather than quantitative because of the difficulty of measuring it. However, Piaget cites the inner time of music as quantitative, as well as stress in speech and metre in poetry.
56. *Ibid.*, pp. 303–304.
57. *Ibid.*, p. 304.
58. Reichenbach, *op. cit.*, p. 123.
59. Capra, *op. cit.*, p. 161.
60. *Ibid.*, p. 166.
61. *Ibid.*, p. 167–168.
62. *Ibid.*, p. 208.
63. Joseph Needham, in *Science and Civilization in China*, quoted in *The Tao of Physics*, p. 214.
64. *Ibid.*, p. 211.
65. *Ibid.*, p. 209.
66. *Ibid.*, pp. 135–136.
67. Albarn and Smith, *op. cit.*, p. 14.
68. *Ibid.*, p. 81.
69. Capra, *op. cit.*, p. 140.
70. *Ibid.*, p. 141.
71. *Ibid.*, pp. 276–277.
72. *Ibid.*, p. 285.
73. Albarn and Smith, *op. cit.*, p. 19.
74. *Ibid.*, p. 22.
75. Capra, *op. cit.*, p. 300.
76. Albarn and Smith, *op. cit.*, p. 18.
77. *Ibid.*, p. 18.

A Continuance . . . (Accumulated Vision—Blocked)
Three Boundaries: Within a Triangle Within a Quadrangle Within a Quadrangle
Lower edge of each corner section of each boundary separately projected (and/or partially blocked and omitted) from a specific position of viewing, 1978

Wood
Dimensions variable
Installation at Sonnabend Gallery, New York City





CHRONOLOGY

compiled by Lacy Davisson

1941 December 28, Barry Le Va was born in Long Beach, California. Son of Arthur and Murial Le Va. Grew up and attended school in Long Beach.

1957–60 High School in Long Beach. Studied architecture.

1960–63 Attended college at Long Beach City College and California State University at Long Beach. Studied architecture and mathematics for first two years, then transferred to the art department.

1963 Student at Los Angeles College of Art and Design.

1964–67 Attended Otis Art Institute and received B.F.A. and M.F.A.

1966 First colored felt works completed.

1967 First black and grey felt works completed. Exhibited first colored felt installation publically at the Lytton Center of Visual Arts, Los Angeles. Worked at odd jobs and drove a truck for Cart & Crate, a Los Angeles art-shipping firm.

1968 Received Young Talent Grant from the Los Angeles County Museum. Left Los Angeles.

1968–70 Worked as an instructor at the Minneapolis College of Art and Design, where he taught First Year Foundation class. Visited New York City in 1968 for the first time and from then on traveled to New York semi-regularly until moving there.

1969 First solo exhibition at the Minneapolis Institute of Art, of two consecutive installations within the same space:
1. Chalk, mineral oil, paper towelling
2. Chalk

Installations utilizing stereo sound, (*Impact Run* at Ohio State University, Columbus), and red iron oxide, glass, and mineral oil, (at Walker Art Center, Minneapolis), exhibited for the first time. Included in "Anti-Illusion" show at the Whitney Museum of American Art, New York. Spent summer traveling through Europe by train visiting London, Paris, Rome, Venice, Florence, and Barcelona.

1970 First solo exhibition in Europe at Gallery Ricke, Cologne, Germany. Moved to New York City and lived at 74 Grand Street until 1978.

1971 *2nd version of 6 Blown Lines*—retitled: *Extended Vertex Meetings: Blocked; Blown outwards.*
Circle Series
Part 2—*Intersecting circles and centerpoints series*—4 installations exhibited consecutively within 30 day period. Exhibited at Nigel Greenwood Gallery, London, England.

1972 Joined Bykert Gallery, New York, New York.

1973 First solo exhibit in New York City at Bykert Gallery, istallation of *Traveling Lengths series—12 lengths in 3 areas: walked zig-zag, walked end over end. (Ends touch; ends cut.)*

1973–74 Taught Advanced Sculpture class at Princeton University, New Jersey.

1974 Received Solomon R. Guggenheim Fellowship for Sculpture. Exhibited first installation of *Centerpoints and lengths (through points of tangency)* 4 areas separately overlayed. Each area comprised of 5 circular areas tangent to and inscribed within each other (first circle of each area tangent to an adjacent wall.), Joseloff Gallery, Hartford Art School, Hartford, Connecticut.

1975 First installation of *Accumulated Vision: projected length ratios.* Series—at the Montreal Musée d'Art Contemporain, Montreal, Canada.

1976 Received National Endowment for the Arts Fellowship.

1977 First exhibition of *Extended Boundaries* at Wright State University Galleries, Dayton, Ohio.

1978 Taught Fourth Year Workshop at the School of Visual Arts, New York, New York. Exhibit of drawings and installation
A Continuance . . . (Accumulated Vision—Blocked)
Three Boundaries; Within a Triangle Within a Quadrangle Within a Quadrangle, at Sonnabend Gallery, New York, New York.

SELECTED EXHIBITIONS

Solo Exhibitions

1969 Minneapolis Institute of Art, Minnesota
University of Wisconsin, Menomenie, Wisconsin
Walker Art Center, Minneapolis, Minnesota
Ohio State University, Columbus, Ohio
University of Wisconsin, River Falls, Wisconsin

1970 Gallery Ricke, Cologne, Germany

1971 Gallery Ricke, Cologne, Germany
Nigel Greenwood Gallery, London, England
University of Utrecht, The Netherlands

1972 Gallery Ricke, Cologne, Germany
Ursula Wevers Gallery Projection, Cologne, Germany

1973 Felix Handshin Gallery, Basel, Switzerland
Gallery Ricke, Cologne, Germany
Zwirner Gallery, Cologne, Germany
Bykert Gallery, New York, New York

1974 Texas Gallery, Houston, Texas
Joseloff Gallery, Hartford Art School, Connecticut
Bykert Gallery, New York, New York
Galleria Toselli, Milan, Italy

1975 Daniel Weinberg Gallery, San Francisco, California
Claire Copley Gallery, Los Angeles, California
Bykert Gallery, New York, New York
Espace 5, Montreal, Canada
Musee D'Art Contemporain, Montreal, Canada

1976 Sonnabend Gallery, New York, New York
Gallery Ricke, Cologne, Germany
Galerie Sonnabend, Paris, France
Texas Gallery, Houston, Texas

1977 Claire Copley, Los Angeles, California
Daniel Weinberg Gallery, San Francisco, California
Wright State University Art Galleries, Dayton, Ohio

1978 Texas Gallery, Houston, Texas
Sonnabend Gallery, New York, New York

Group Exhibitions

1967 Lytton Center of Visual Arts, Los Angeles, California

1968 "2 Painters, 1 Sculptor," California State College, Los Angeles, California

1969 "Conception-Perception," San Francisco Art Institute, California
"Appearing-Disappearing Object," Newport Center of Arts, Balboa, California
"Anti-Illusion: Procedure and Materials," Whitney Museum of American Art, New York, New York
"557,087," Seattle Art Museum, Washington

1970 "955,000," Vancouver Art Gallery, Vancouver, British Columbia
"Art in the Mind," Allen Art Museum, Oberlin, Ohio
"Projections," La Jolla Museum of Art, San Diego, California
"Nine Artists, Nine Spaces," Minnesota State Arts Council, Minneapolis, Minnesota
"Information," Museum of Modern Art, New York, New York
"Contemporary American Sculpture," Whitney Museum of American Art, New York, New York

1971 "American Drawings," Gallery Ricke, Cologne, Germany
"7 Artists, 7 Works," Gallery Ricke, Cologne, Germany

1972 Bykert Gallery, New York, New York
"Documenta 5," Kassel, Germany
"Prospect," Kunsthalle, Dusseldorf, Germany
"10 Years," Los Angeles County Museum, California

1973 "Options and Alternatives," Yale University Art Gallery, New Haven, Connecticut
"American Drawings 1963–1973," Whitney Museum of American Art, New York, New York
Bykert Gallery, New York, New York
"Drawing Exhibition," Philadelphia Museum of Art, Tyler College, Pennsylvania
"New American Graphic Art," Fogg Art Museum, Cambridge, Massachusetts
"3 Collections," Kunst Museum, Stuttgart, Germany

1974 "71st American Exhibition," Art Institute of Chicago, Illinois
"Drawings: 70's," Hartford Art School, Connecticut
"Art Now '74," John F. Kennedy Center for the Performing Arts, Washington, D.C.

1975 "Mel Bochner, Barry Le Va, Dorothea Rockburne, Richard Tuttle," The Contemporary Arts Center, Cincinnati, Ohio
"Fourteen Artists," Baltimore Museum, Maryland
"U.S.A., Drawings III," Städtisches Museum, Leverkusen, Schloss Morsbroich, West Germany

1976 Broxton Gallery, Los Angeles, California
"Line," Philadelphia College of Art, Pennsylvania
Renaissance Society, University of Chicago, Illinois
Suzanne Hilberry Gallery, Birmingham, Michigan
"200 Years of American Sculpture," Whitney Museum of American Art, New York, New York
Rene Block Gallery, Berlin, Germany

1977 "Drawings, Barry Le Va and Sol LeWitt," Daniel Weinberg Gallery, San Francisco, California
"Documenta 6," Kassel, Germany
"Whitney Biennial," Whitney Museum of American Art, New York, New York
"3 Installations: Acconci, Bochner, Le Va," Sonnabend Gallery, New York, New York
"Andre, Le Va, Long," Corcoran Museum of Art, Washington, D.C.
112 Greene Street, New York, New York

1978 University of California, Santa Barbara, California

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researched by Lacy Davisson

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WORKS IN THE EXHIBITION

unless otherwise indicated, all dimensions are in inches
height preceding width and depth

Studies—Colored Felt, 1966
Pencil on paper
19 × 24
Courtesy of the artist

6 Hands, 1966
Pencil on paper
18 × 24
Courtesy of the artist

7 Handed Paper Shuffle, 1966
Pencil on paper (14 components)
overall 58 × 52
Courtesy of the artist

Possibly the Simultaniety of Events: an attempt, 1967
Ink and pencil on paper
8½ × 11
Courtesy of the artist

"4", 1967–68
Ink and pencil on paper
17⅛ x 22⅛
Courtesy of the artist

Three Arrangements of Grey Felt (#1 original,
#2 duplication,
#3 reorientation), 1967
Ink and pencil on paper
17⅛ × 22¼
Courtesy of the artist

Tangle Distribution/with red iron oxide, 1976–1968
Ink and pencil on paper
17 × 22
Courtesy of Sonnabend Gallery, New York, New York

Repeated events within the same context (3 phases) #1, 1967–1968
Ink and pencil on paper
17⅝ × 22¼
Courtesy of the artist

Repeated events within the same context (3 phases) #2, 1967–1968
Ink and pencil on paper
17⅝ × 22¼
Courtesy of Sonnabend Gallery, New York, New York

Study: Three arrangements of different quantities of iron oxide, glass and mineral oil, 1968
(to be installed as one, divided into three parts)
Ink and pencil on paper
19 × 23⅝
Courtesy of the artist

Chalk Blow (with walls) #1, #2, #3, #4, 1969
Felt-tip marker and pencil on paper, and black and white Drawings, 17 × 23⅞;
photo 7¼ ×9½
Courtesy of the artist

Installation Study: within one circular area, outside three circular areas (B), 1969
Felt-tip marker and pencil on paper
19 × 23¾
Courtesy of the artist

Installation Study: within two circular areas, outside two circular areas, 1969
Felt-tip marker and pencil on paper
19 × 23¾
Courtesy of Sonnabend Gallery, New York, New York

Installation Study: within two areas (one circular, one square) outside one square area, 1969
Felt-tip marker and pencil on paper
19 ×23¾
Courtesy of Sonnabend Gallery, New York, New York

Installation Study: within one circular area, outside three circular areas, 1969
Felt-tip marker and pencil on paper
19 × 23¾"
Courtesy of Sonnabend Gallery, New York, New York

#10 (to be arranged in grey felt), 1969
Pencil on paper
20½ × 25½
Courtesy of Sonnabend Gallery, New York, New York

4 Phase-corner blow piece, 1969
Pencil on paper
21 × 25½
Courtesy of Sonnabend Gallery, New York, New York

3 Arrangements of same quantities and contents, 1969
Pencil on paper
17 × 22
Courtesy of the artist

Velocity: Installation Ohio State University, 1969
Felt-tip marker and pencil on paper (2 components)
11 × 16½ each
Courtesy of the artist

Extended Vertex Meetings: Blocked; Blown Outwards, 1969–1971
Ink on paper (2 components)
11 × 17
Felt-tip marker and ink on tracing overlay
14⅛ × 40
Courtesy of Sonnabend Gallery, New York, New York

Intersections—7 Circles; 3 Varying sizes
all tangent to 2 opposite sides, none to both, 1971
Ink and pencil on paper
42 × 36
Courtesy of the artist

Plan View 4 room installation
"A Comparison" (walked objects according to their own dimensions), 1972
Ink and pencil on paper
17¼ × 22¼
Courtesy of Sonnabend Gallery, New York, New York

1 Room, 2 Room or 3 Room Installation Study: Unequal Length Sections Cut Circular
(walked end-over-end in their own circular path) (ends touch; ends cut), 1973
Ink and pencil on paper
22 × 51¾
Courtesy of the artist

Installation (Perspective View): Unequal Length Sections Cut Circular
(walked end-over-end in their own circular path) (ends touch; ends cut), 1973
Ink and pencil on paper
18⅞ × 23⅞
Courtesy of Sonnabend Gallery, New York, New York

Installation Plan: Unequal Lengths Cut Circular
(walked end-over-end in their own path) (ends touch; ends cut), 1973
Ink on paper
17 × 22
Courtesy of the artist

Installation Plan: Unequal Lengths Cut Circular
(2 Phases overlapped) (walked end-over-end in their own circular path) (ends touch; ends cut), 1973
Felt-tip marker and pencil on paper
18⅞ × 23⅞
Courtesy of the artist

Installation Study—4 length sections
(walked zig-zag; walked end-over-end) (to nearest wall), 1973
Pencil on paper
42 × 54
Courtesy of the artist

3 Room Installation Study: Unequal Length Sections Cut Circular
(walked end-over-end in their own circular path) (ends touch; ends cut), 1973
Ink and pencil on paper
36¼ × 48¼
Courtesy of the artist

Double Center Exchange 12 Lengths: walked zig-zag, 1973
Pencil on paper
42 × 54
Collection of Paul Walter, New York, New York

Installation Plan—Sheet A,
Two circular areas: Split by a Diagonal wall, and shifted, 1973
Pencil on paper
22 × 36⅛
Courtesy of Sonnabend Gallery, New York, New York

Installation Plan—Sheet B,
Two circular areas: Split by a diagonal wall, and shifted, 1973
Pencil on paper
22 × 36⅛
Courtesy of Sonnabend Gallery, New York, New York

3 Room Installation Study: Unequal Length Sections Cut Circular (walked end-over-end in their own circular path) (ends touch; ends cut), 1973
Pencil on paper
36¼ × 48¼
Courtesy of the artist

Tangents Indicated, Segments Enclose, 1974–1975
Ink on paper
42 × 60
Courtesy of Sonnabend Gallery, New York, New York

Installation drawing for Gallery Toselli, Milan, Italy, 1974
Pencil on paper (3 components)
17 × 22
Courtesy of the artist

Installation Drawing for Cincinnati Art Center, Cincinnati, Ohio, 1974
Pencil on paper (3 components)
17 × 22
Courtesy of the artist

Centerpoints and Lengths through points of Tangency: 6 areas separately overlaid into 3 equal spaces each area comprised of 5 circles tangent to and inscribed within each other, 1974
Pencil on paper
42 × 126
Sonnabend Collection, New York, New York

Installation Plan—Accumulated Vision (separated stages): Length ratios, 1976
Felt-tip marker and pencil on paper
42¼ × 35½
Courtesy of the artist

Accumulated Vision: Space B (B+ in part, space A) + Space A (A+ in part, space B) Installation drawing: Corcoran Gallery of Art, 1976
Ink and pencil on paper
37 × 32⅝
Courtesy of the artist

Corner Sections (of 5, four-sided boundaries) separately projected from 18 positions of viewing, 1977
Ink and pencil on paper
40 × 88
Courtesy of Sonnabend Gallery, New York, New York

Corner Sections (of 1, four-sided and 2, three-sided boundaries) separately projected from 10 positions of viewing, 1977
Pencil on paper
40 × 76
Courtesy of Sonnabend Gallery, New York, New York

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