## Natural Inflections of the Abstract Sculptural Object

Douglas Dreishpoon



Fig. 1
Robert Laurent
The Flame c. 1917
Wood
18×3-1/2×3-1/2 inches
Collection of Whitney Museum of
American Art, New York
Not in exhibition
Photo: Geoffrey Clements

Addressing the state of abstract American sculpture by 1949, Theodore Roszak (1907–1981) made the following observation:

I do not believe that a visual expression is ever totally beholden to an exact transcription of nature, nor is it ever completely removed from it. Art is always arrived at through some process of abstraction, and the divergence from nature which we perceive or feel is merely a question of degree or kind. I have yet to see any work, however 'abstract," that has not already had its counterpart in nature or in the manmade world. The most rigid geometry in contemporary art pales when we take time to explore geometric formulations in mineral and other crystalline structures. Microscopic observation reveals a world of geometric and amorphic structures that dispels at a glance the myth that abstract art bears no indebtedness to nature.1

Roszak's statement, posited shortly after his rejection of constructivist principles, today offers no revelatory insight. In fact, to think of sculpture (or painting for that matter) as an entity apart from nature seems ludicrous. From the paleolithic Venus of Willendorf and prehistoric cult statues on Easter Island to contemporary work by Theodore Roszak, Michael Lekakis, and Richard Serra, natural forms, cycles, and systems continue, either consciously or unconsciously, to affect individual perception and, by extension, the fabrication of sculptural objects. If one considers the early development of abstract American sculpture, nature's intrusion was welcomed, at least by the artists themselves. The production of abstract or semi-abstract images, initially a reaction against a vapid figurative tradition, in many cases required an indisputable defense or transcendent raison d'être. And one could, as Roszak did (though much later) invoke nature as a vast

repository of forms whose translation into abstract sculptural equivalents—equivalents that spanned the stylistic gamut from geometric to amorphic—offered endless possibilities.

As early as 1917, Robert Laurent (1890-1970) captured the elusive essence of one of nature's primordial elements in The Flame (Fig. 1). Without its title The Flame could easily pass for an abstracted plant form or burgeoning vegetable growth, and Laurent's intuitive and unpremeditated approach to his materials signaled an innovative departure from his more figurative work. The reduction of natural forms to non-objective sculptural motifs (in Laurent's case, inspired by his introduction to modern European sculpture in the Armory Show) was paralleled in painting and photography by Arthur Dove, John Marin, Georgia O'Keeffe, Alfred Stieglitz, and Paul Strand. The notion of equivalency (the abstract reductive motif that sustains a dynamic rapport with nature) originally issued from fin-de-siècle critical theory-Albert Aurier's defense of art that was Ideist, Symbolist, and Subjective-the continued proliferation of Art Nouveau, and synaesthetic principles expounded by Wassily Kandinsky. Needless to say, as one moves into the twentieth century, the artistic and cultural forces that forged the development of abstract American sculpture produced extensive work whose ideological motivations were extremely diverse. And yet, in spite of what would appear to be a stylistically and ideologically fractured lineage, from, say, Laurent to Lekakis, Smithson to Serra, a continuous dialogue with nature at some collective level persists.

Natural Forms and Forces therefore is an appropriate theme for investigating the perpetual impact of natural forms and systems on the sculptural arts. Consider the implications of this theme on a broader physiological level. As early as

1917, in his classic book *On Growth and Form*, D'Arcy Thompson described the causality between natural morphology and the forces that act upon it.

The form, then, of any portion of matter, whether it be living or dead, and the changes of form which are apparent in its movements and in its growth, may in all cases alike be described as due to the action of force. In short, the form of an object is a 'diagram of force,' in this sense, at least, that from it we can judge of or deduce the forces that are acting or have acted upon it: in this strict and particular sense, it is a diagram.... In an organism, great or small, it is not merely the nature of the motions of the living substance which we must interpret in terms of force (according to kinetics), but also the conformation of the organism itself, whose permanence or equilibrium is explained by the interaction or balance of forces...[italics are Thompson's]2

The idea of natural forms existing in dynamic equilibrium with physical forces, when applied to the field of sculpture, broadens interpretation. If "form" in Thompson's analysis becomes a sculptural equivalent, then "force," within this scheme, has a direct relationship to "process" and the materialization of sculptural ideas. To say that a sculpture "looks" like something in nature (i.e., a leaf, plant, vegetable or crystalline body, etc.) reduces a reading of the object to mere resemblances. Thompson's notion of morphology as a physiological "diagram" extends a one dimensional reading by coupling formal issues of scale, composition, and technique with aesthetic attitudes shaped by personal philosophies, psychodynamic cultural "forces."

Similar issues can be developed around another early abstract sculpture. Though primarily a painter, Max Weber



Fig. 2
Max Weber
Equilibrium 1915
Bronze
23-1/2×11-1/2×10-1/2 inches
Courtesy Forum Gallery, New York
Not in exhibition

(1881-1961) executed Equilibrium in 1915 (Fig. 2). The title itself suggests balance and tension, a system in dynamic equipoise. One could analyze Weber's piece formally and discuss its configurational equilibrium in terms of a Cubist arrangement of intersecting geometric planes offset by a vigorously modeled vertical staff culminating in a sphere. While such a reading focuses on compositional values, the implications of "equilibrium," also embody polarities (stylistic as well as ideologic) whose adaptations and permutations have forged the parameters of modernist sculpture: figuration/abstraction; amorphic-biomorphic/geometric; symmetry/asymmetry; intuitive/systematic; order/disorder; and naturalistic/ mechanistic. This list can easily be expanded, but implicit in each sculptural mode is a series of personal choices balanced by aesthetic and nonaesthetic factors.

Natural Forms and Forces is organized around two sections: one historical and the other contemporary. For the historic section I have selected five sculptors whose work addresses various aspects of this theme: Theodore Roszak, Michael Lekakis, Ruth Vollmer, Eva Hesse, and Robert Smithson. Acknowledging the range and diversity of this group, I assembled selected sculpture and drawings by each. As an ensemble that generates its own internal dialogues and comparisons, this "historic" section was primarily intended to complement its contemporary extension without proposing affinities or continuities.

Theodore Roszak's rejection of hardedged Precisionism—a machine aesthetic that characterized his work up until 1945—not only signaled his dissatisfaction with constructivist principles but reflected an even greater uncertainty about the future of mankind. He voiced his ambivalence as early as 1946: The constructivist's position, historically, with its influence upon architectural and engineering design has been and is an important one, continuing to have its effect upon artists and designers alike. At the same time that these "constructive" purposes and intentions exist, the world is fundamentally and seriously disquieted and it is difficult to remain unmoved and complacent in its midst.<sup>3</sup>

Roszak's initial adaptation of constructivism embraced the progressive rationalism of science and technology, though some of his paintings and constructions from the 1930s flirt with dreams and Surrealist flights of fancy. Later, as one of four sculptors asked by The Museum of Modern Art to participate in a symposium on "The New Sculpture," Roszak described his "constructivist" optimism as having been motivated by an, "unfettered objectivity...holding out the promise of contributing and perhaps even sharing in the work of the Brave New World."<sup>4</sup> Shortly after the first atomic bombs were released on Hiroshima and Nagasaki, an "unfettered objectivity," reflected in the metallic sheen and "streamlined" precision of his earlier constructions (Fig. 3), reverted inward. Roszak could no longer accept the utopian world view of a technocratic society in control:

When World War II came to an end, I already knew that the constructivist gears had shifted and from my point of view the whole structure took off!....in reverse.....leaving devastation in its wake.<sup>5</sup>

The devastation of two Japanese cities gave rise to a chorus of concerned individuals, artists/intellectuals, scientists, and humanists, who clearly saw the other, darker side of technological progress. Many, including Albert Einstein, publicly expressed their concern:

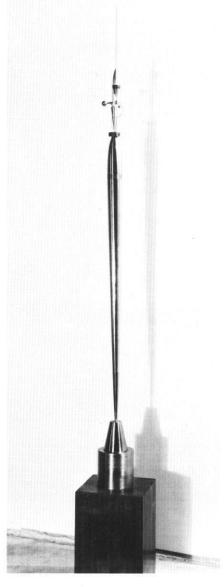


Fig. 3
Theodore Roszak
Ascent 1938
Steel, bronze, and aluminum
19 inches high
Private collection, courtesy Zabriskie
Gallery, New York
Not in exhibition

By painful experience we have learnt that rational thinking does not suffice to solve the problems of our social life. Penetrating research and keen scientific work have often had tragic implications for mankind, producing, on the one hand, inventions which liberated man from exhausting physical labor, making his life easier and richer; but on the other hand, introducing a grave restlessness into his life, making him a slave to his technological environment, and-most catastrophic of all-creating the means of his own mass destruction. This, indeed, is a tragedy of overwhelming poignancy!6

Delivered at a time when scientific advances appeared to offer up a transcendental state of perfection and grace, Einstein's message presented a disturbing paradox. Molecular forces harnessed into deadly weapons whose awesome potential defied explanation cast a grave shadow over the presumed omniscience and "enlightenment" of scientific investigation. Although the polemic so poignantly expressed by Einstein in 1948 had preoccupied humanists since the advent of the Industrial Revolution, by the end of the Second World War it had reached a critical threshold.

Doubt and disquiet provoked a radical change of aesthetic and material process in Roszak's work. After 1945 he rejected the polished chromium surfaces of his machine-tooled constructions for steel assemblages whose welded and brazed surfaces were coarse and pitted. While he felt obliged to explain this transition through art historical schema – from the rational constraints of Classicism to the emotional pulsations of the Baroque – his choice of materials and technique perfectly suited his formal strategy:

The forms that I find necessary to assert, are meant to be blunt reminders of primordial strife and struggle, reminiscent of those brute forces that not only produced life, but in turn threatened to destroy it. I feel that if necessary, one must be ready to summon one's total being with an all-consuming rage against those forces that are blind to the primacy of lifegiving values. Perhaps by this sheer dedication, one may yet merge force with grace.<sup>7</sup>

An "all-consuming rage against those forces...blind to the primacy of lifegiving values," generated among an extended group of artists, philosophers, and humanists in general a desire to relocate the "essence of being" through mythology, archetypal imagery, and atavistic recapitulation. Roszak's interest in mythological equivalents that transcended time was shared by a community of artists and intellectuals that included David Smith, David Hare, Jackson Pollock, Mark Rothko, Erich Fromm, Lewis Mumford, and Joseph Campbell, to name just a few.

In an attempt to reconstitute man's essential personality, Roszak created "proto-images that cut across time." A prolific draughtsman, he generally sketched out ideas in many variations before beginning a piece (Figs. 4 and 5). With these drawings he determined the basic configuration for a steel armature which he then welded and brazed with alloys. Certain ideas, such as Fledgling, generated subsequent drawings even after the sculpture had been executed. Pieces such as Golden Bough (named after Sir James Frazer's anthropological study of the same title) and Fledgling (Figs. 6 and 7) imply ritualistic transformation, metamorphosis, and burgeoning growth; their abstracted forms and activated surfaces are the result of an unconstrained imagination and a facile control with torch and steel. From 1945



Fig. 4
Theodore Roszak
Fledgling No. 15 1953
Ink and wash on paper
30×22-1/4 inches
Lent by the estate of the artist



Fig. 5
Theodore Roszak
Study for Fledgling 1956
Pen and ink and wash on paper
17-1/2×11-1/2 inches
Lent by the estate of the artist



Fig. 6
Theodore Roszak
Golden Bough 1949–1950
Steel brazed with brass and copper
18×13-1/2 inches
Lent by the estate of the artist



Fig. 7 Theodore Roszak Fledgling 1953 Steel brazed with copper Lent by the estate of the artist

until his death in 1981, Roszak's work was sustained by a fecundity of ideas. He never stopped drawing (a discipline that included forays into print making and lithography) and many sketches germinated sculptural counterparts. He was continually inspired by progressive developments, such as the escalation of space exploration during the late 1950s and 1960s, but he scrutinized scientific progress with an aesthetic skepticism. His work maintained an aggressive expression that reaffirmed intuition by assaulting what he believed to be technocracy's "reduction of man's personality to a docile and convenient cipher." In an attempt to elucidate what he considered to be an important tenet in modern sculpture, Herbert Read coined the term "Vitalism." An elusive principle colored by the earlier writings of Henri Bergson (particularly his notion of life force or élan vital), D'Arcy Thompson's On Growth and Form, and Henri Focillon's La Vie des Formes (1934), Vitalism came to embody a philosophical stance that elevated intuition and instinct above scientific rationalism. Within Read's vital scheme of things, sculptors as stylistically diverse as Rodin, Brancusi, Picasso, Archipenko, Moore, Giacometti, Arp, Hepworth, and others were united under one aesthetic;9 the vitalistic sculptor possessed a "hyperesthetic" sensibility that enabled him to function as a medium through which nature's universal forms found their sculptural incarnation. Read was motivated to formulate such a lineage because of his desire to explain the synthesis that was possible between geometric work and work that was more organic - amorphic or naturalistic, possessing a minimum of straight and perpendicular lines. In spite of his efforts to find a greater order in the development of modernist sculpture, the formal ramifications of Vitalism remained open-ended and its acceptance or rejection a matter of personal choice.

Implicit in the idea of Vitalism is a poetic reverence towards nature. In this respect the work of Michael Lekakis (born 1907) represents a contemporary extension of this sensibility (Figs. 8 and 9). From his early adolescence in a traditional Greek community and living in the heart of the Manhattan flower district, Lekakis sustained a deep respect for natural beauty, growth, and germination. His work has always been an affirmation of these organic principles and each piece reflects his search for form within an organic matrix molded by natural elements. His choice of wood as a dominant material is a central hallmark of his aesthetic. Other materials such as bronze and plaster, while they offer viable alternatives, ultimately lack "entasis" or a rhythmic vitality that makes each piece of wood unique and alive. If Roszak after 1945 approached his medium aggressively, forging, welding, and brazing steel and alloys into complex configurations, Lekakis has maintained a position of "neutrality." With humility and sensitivity, he carves, saws, and sands wood not to impose but to expose the natural forms inherent in his material:

The concepts for my sculpture are not mine.... They already exist in the nature of experience.... When I see a piece of wood, if I have a rapport with it, I immediately see what its possibility is.... but I bring to this vision all the available knowledge of structure and process.... If I am truly creative, I will realize from this piece of wood its full potential.... But this is not expressing myself.... It is the expression of universal forms and processes as far as they are possible in a particular piece of material. <sup>10</sup>

A reverential attitude towards his materials and process implies a cosmological dimension and an affinity to spiritual objects crafted by ancient and



Fig. 8
Michael Lekakis
Choani 1949–1962
Oak on elm base
55 inches high (with base)
Lent by Kouros Gallery, New York

primitive societies. In a review he wrote on "Greek Art of the Aegean Islands," organized by The Metropolitan Museum of Art in 1980, Lekakis, though perhaps inadvertently, confirmed his sculptural kinship with Greek and Cycladic traditions while lauding the conception of timeless and visionary objects:

Beginning in the great antiquity, sculptors moved deeper and deeper, higher and higher with visionary dedication....
Material reality found the way to pass into cosmic reality and they became one; and one with creation. There is not a single work in the Aegean exhibit that has not been initiated by love. The stone and clay vessels are receptacles of the soul. Having a pulse of their own, they contained all things that belong to the human condition.... Everywhere the preoccupation with universals is uppermost. They live the moment of this existence as though they live forever. <sup>11</sup>

Just as ancient sculptors simplified human and animal figures to essential geometries, Lekakis, without ever becoming repetitively formulaic, probes his material for intrinsic shapes: variations on the sphere, spiral, tetrahedron, pentahedron, cube, column, etc., combined with abstract amorphic/biomorphic forms. Far from being static or predictable, his heuristic investigations pulsate with life.

A piece such as *Choani* is gnarled and aggressive, while *Dance* (Fig. 10), gracefully carved from a single sassafras root, embodies the essence of fluid movement. *Choani* also possesses an elaborately carved base. In Lekakis' work this element constitutes an integral part of the total conception of each piece. Conceived holistically, the base serves, in his own words, as an "altar" to elevate his forms. Such an atti-

tude clearly derives from Brancusi, but is given a fresh interpretation. Like Brancusi, Lekakis has never felt constrained by stylistic categories or techniques. In *Vlastisis* he carved a spiral repeat that culminates in a bulbous extension. Within this single piece stylistic distinctions between biomorphic versus geometric, organic versus systematic seem ludicrous; these aspects are fused and perfectly balanced. The reductive simplification that distinguishes his sculpture also characterizes his drawings (Fig. 11). Based on a trip he made through the Grecian islands in 1952, Delos #16 depicts the coastal meandering of this island with the same facile control and subtlety that directs the surface modulations of his sculpture. In all of his work Lekakis achieves a revelation of form through intuited strategies and touch.

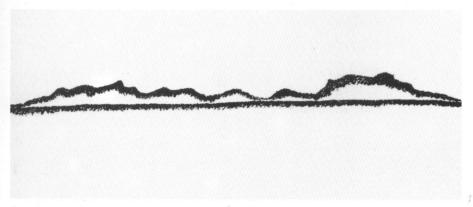


Fig. 11 Michael Lekakis Delos #16 1952 Ink on paper 14-1/2×22 inches Lent by Kouros Gallery, New York



Fig. 9
Michael Lekakis
Vlastisis 1947–1957
Walnut
15×22×13 inches
Lent by Kouros Gallery, New York

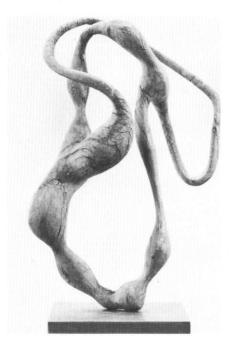


Fig. 10
Michael Lekakis
Dance 1958
Sassafras
30 inches high with 2 inch base
Courtesy Kouros Gallery, New York
Not in exhibition
Photo: Robert E. Mates

In the early 1960s a generation of American sculptors set out to purge sculpture of all histrionic and narrative overtones, figurative and anthropomorphic innuendo. They fabricated austere objects whose modular shapes and uninflected surfaces strove for clarity and anonymity. Ideological and material reduction was pursued as an intellectual, at times quasi-scientific discipline, but in spite of its formal rigor, the Minimalist object retained a residual personality. One has little difficulty, for instance, distinguishing between early "modular boxes" by Donald Judd, Larry Bell, Sol LeWitt, and Robert Morris, just as a painting by Piet Mondrian is worlds apart from a painting by Ilya Bolotowsky in spite of their "Neoplastic" orientation. The renunciation of personal inflection even in the most severe Minimalist work seemed to certain individuals working within the same dialectic, paradoxical and a bit absurd. In this respect Ruth Vollmer and Eva Hesse share significantly.

Ruth Vollmer (1903-1982) emigrated to America from Germany in 1935 and became a United States citizen in 1943. While she began to make sculpture during the late 1940s-children's toys, wire animals and dolls-her most important work was begun in the late 1950s and shown in a series of one person shows at Betty Parsons Gallery from 1960 to 1979. From the late 1950s until her death Vollmer discovered an abundance of ideas in the gap between mathematics and art. Based on methodical research, her progression began in a more personal mode (bronze castings in various amorphic shapes, vessels, and spheres) and culminated in wood, aluminum and lucite objects whose perfect shapes represented the visual incarnation of mathematical theorems (Fig. 12). 12 The focus in this exhibition is on her earlier work: a series of bronze pieces executed between 1961 and 1965 (Figs. 13, 14). This selection represents a transitional period, prior to Vollmer's inves-

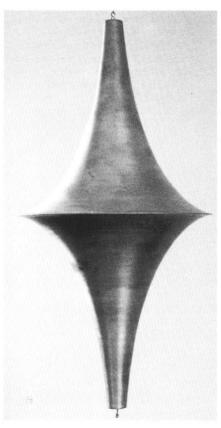


Fig. 12 Ruth Vollmer Pseudosphere 1970 Spun aluminum 80×40×40 inches Courtesy Jack Tilton Gallery, New York Not in exhibition



Fig. 13
Ruth Vollmer
Musical Forest 1961
Bronze
9-1/2 inches (diam.)
Lent by Dorothy and Leo Rabkin, photo courtesy Jack Tilton Gallery, New York



Fig. 14
Ruth Vollmer
Ovaloid with Hammers 1961
Bronze
10-1/2×11 inches (8 inches diam.)
Lent by Jack Tilton Gallery, New York
Photo: H. Landshoff

tigation of pure geometry, when she was probing the mystery of Pascal's "...infinite sphere, whose center is everywhere and whose circumference is nowhere."

That the sphere early on became an important aspect of Vollmer's work, conveying a host of personal allusions and symbolic references was confirmed in several statements made by the artist between 1964 and 1966:

I started in a round-about way exploring the sphere in a series of sculptures exhibited at Betty Parsons Gallery in 1963. These were related to the sphere, like the Walking Ball, gourd-like forms, ovaloids, and a culminating major piece, The Obelisk .... I suppose that the sphere does have a more general, basic or symbolic meaning-the cosmos, earth, womb, etc.-but even if I had 'an artistic program' my real activity would always lead me to myself.... The next step was to explore the sphere geometrically. I was looking inside and I was looking for proportions. After the first series of these spheres, I still felt that I had not gained an iota of understanding of this mysterious form.... I now feel I have made the first step (in what direction I don't have an inkling) of finding forms inside the sphere, hollow and full. Being immersed in this mysterious form, I perceive vaguely an endless variety of cosmic and earthly; biologic and crystalline manifestations. I am concerned not to destroy the mystery while exploring.... We have never seen the interior of the earth...Is it solid, fire, rock?<sup>13</sup>

In an extended series of bronze spheroids begun shortly after her husband's tragic death, Vollmer made no attempt to disguise or conceal her hand. In fact, one of the most exquisite aspects of these pieces is their rich and textured surfaces. She labored hard to enliven each piece with patinas, and also filed, scraped, torched, and in some cases made impressions with natural objects such as sea shells. Her central objective was to humanize forms inherently cerebral and abstract; by layering these with textures, piercing, cutting into, or hollowing out in order to incorporate interior structures, she violated the severity of pure geometry. One of her earliest variations on the sphere, Musical Forest (1961) resembles a petri dish used by bacteriologists to grow various culture strains. The vertical bronze elements seem to sprout from the center, and when Vollmer realized that each one had a distinct pitch when struck with a wooden mallet or percussive brush, she gave the piece its present title. In Ovaloid with Hammers (1964), executed in several variations, she welded steel hammerheads around the interior of a hollow elliptical sphere open at one end. Biological/anatomical associations (i.e., the interior of a large intestine or colon) introduce anthropomorphic qualities that give this work a quirky and provocative intensity not unlike contemporaneous work by Eva Hesse and Lee Bontecou.

Vollmer's later work could be seen as a culmination of her research, where the elimination of superfluous detail was inevitable. In the greater history of nonobjective sculpture, however, Vollmer's "primary forms" perpetuate a long tradition of visual mathematics initiated as early as the 1880s by the French mathematician and physicist Jules Poincaré (whose theoretical models were discovered in the 1930s by Max Ernst and photographed by Man Ray), and continued into the 1920s and 1930s by sculptors and industrial designers such as Storrs, de Rivera, Boyd, Bel Geddes, Teague, and Loewy. Vollmer's cast aluminum and lucite forms are not too far removed from those "streamlined" objects inspired by principles of dynamic symmetry and a healthy optimism towards science and technology.

To see her later work within this historical continuum is not intended to undermine its importance, but to my mind her most exciting work was an internal response to impersonal systems. <sup>14</sup> At a particular point in her life Vollmer tempered her own fears and self-doubts through a rigorous study of nature's eternal forms.

The Minimalist object has always presented a paradox when accompanied by its dialectical discourse. A modular lattice cube by Sol LeWitt, for example, embodies a quintessential Minimalist order: an arrangement of systematically conceived and executed elements. The absence of "hands," reflected in its painted white surfaces, reinforces the object's anonymity and emotional reserve. And yet in spite of his work's calculated demeanor, LeWitt has candidly acknowledged the paradoxical overtones and illogical underpinnings of his aesthetic:

Conceptual art is not necessarily logical. The logic of a piece or series of pieces is a device that is used at times only to be ruined. Logic may be used to camouflage the real intent of the artist, to lull the viewer into the belief that he understands the work, or to infer a paradoxical situation (such as logic vs. illogic). The ideas need not be complex. Most ideas that are successful are ludicrously simple. Successful ideas generally have the appearance of simplicity because they seem inevitable. In terms of idea the artist is free to even surprise himself. Ideas are discovered by intuition.1

If LeWitt chose to confront the elusive edges of his conceptual framework with objects that appear to transcend ambiguity and intuition, Eva Hesse (1936–1970) pursued a radically different tack.

Hesse never totally dismissed her fundamental training as a painter; in her sculpture she maintained a dynamic equilibrium between both disciplines. Within a modality of serial repetition she persistently violated what she considered to be arbitrary delineations between mediums. If one has some difficulty locating LeWitt's personality in his objects, the unique character of Hesse's personality permeates every aspect of her work:

...I think art is a total thing. A total person giving a contribution. It is an essence, a soul, and that's what it's about.... In my inner soul art and life are inseparable. It becomes more absurd and less absurd to isolate a basically intuitive idea and then work up some calculated system and follow it through—that supposedly being the more intellectual approach—than giving precedence to soul or presence or whatever you want to call it .... I am interested in solving an unknown factor of art and an unknown factor of life. For me it's a total image that has to do with me and life. It can't be divorced as an idea or composition or form. I don't believe art can be based on that. In fact my idea now is to counteract everything I've ever learned or been taught about those things-to find something that is inevitable that is my life, my feeling, my thoughts....1

While Hesse navigated within the formal boundaries of a Minimalist discourse, she veered towards extremes that transfigured the Minimal object. It is impossible to dissociate her work from its critical milieu; her receptiveness to work by LeWitt, Bochner, Judd, Andre, Agnes Martin, et al. was balanced by a deep respect for the work of Pollock, Johns, Oldenburg, Bontecou, and Samaras. Her own uneasiness about the cool constraint of the former was tempered by the (sometimes fetishistic) exuberance of the latter.

Labeled early on an "Abstract Inflationist," 'Stuffed Expressionist," and "Eccentric Abstractionist," Hesse never occupied stylistic niches comfortably. Her work fought against easy classification the way any discourse developing in a non-defined gap would. Although there is nothing tentative about Hesse's sculptural statements, a strange fragility permeates her work, in much the same way that many of Vollmer's early spheroids possess an inadvertent vulnerability. In the case of Hesse, this sense of fragility is due in part to the materials she used during a short but intensely prolific period from 1964 to 1970: string and yarn, cheesecloth, rubber tubing, papier-mâché and wood-shavings, <sup>17</sup> but also by the way her work suspends and extends itself physically and emotionally. Hesse never intended her sculpture to appear dematerialized or inert, as objects transcendent of their environment. Vinculum I (Fig. 15) requires a wall to lean against; its origin on the wall and termination on the floor, where its rubber tubing falls helter-skelter, highlights the ambiguity between painting and sculpture at the same time it plots a progression from order to disorder. Metronomic Irregularity III (Fig. 16) addresses similar issues: three painted panels systematically pierced and gridded are overlaid with skeins of sculpmetal and wire that randomly interconnect the triptych. Humanizing an inherently systematic order was as much a part of her drawing as it was of her sculpture. In a series of subtle wash and ink target drawings, executed between 1966 and 1968 (Fig. 17), Hesse disrupted the severity of her design by piercing the center of each target with nylon string. Through her drawings the full range of her sensibility and delicate, sometimes tentative gesturing (so much a part of her working process) is revealed. In her drawings line and color become equivalents that register intimate impulses whose unpremeditated spontaneity eludes sculptural translation. In Hesse's last

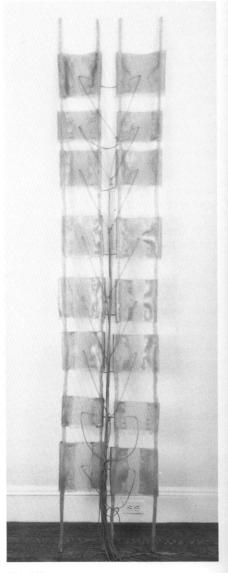


Fig. 15
Eva Hesse
Vinculum I 1969
Fiberglas, rubber tubing and metal screen
2 parts, each 104×8-1/2 inches
Overall dimensions 104×24 inches
Lent by Mr. and Mrs. Victor W. Ganz
Photo: Eric Pollitzer

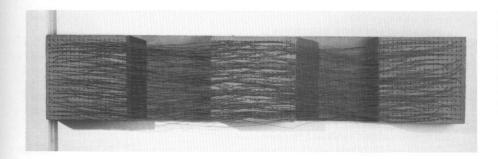


Fig. 16
Eva Hesse
Metronomic Irregularity III 1966
Painted wood, sculpmetal and cottoncovered wire
10×50×2-1/2 inches
Lent by Mr. and Mrs. Victor W. Ganz
Photo: Eric Pollitzer

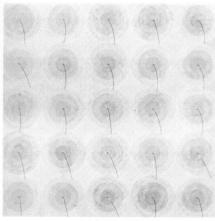


Fig. 17
Eva Hesse
Circle Drawing 1968
Wash on paper with nylon string mounted on board
15-1/2×15-1/4 inches
Lent by Mr. and Mrs. Victor W. Ganz
Photo: Eric Pollitzer

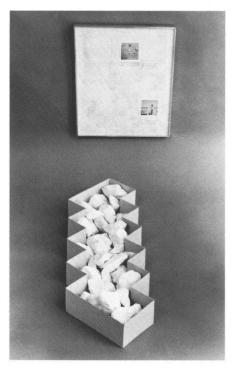


Fig. 18
Robert Smithson
Lava Site in Double Non-Site 1968
Metal bin, volcanic gypsum, framed collage/map
Non-site: 4×36-1/2×11-1/2 inches
Map: 20-3/4×17-1/4 inches
Lent by Gilbert and Lila Silverman, photo courtesy John Weber Gallery,
New York

works on paper, luminous passages of gouache and watercolor hover within a shifting frame of nervously activated lines and shadings. The suspended ropes and strings of *Right After* (1969) and *Untitled* (1970) may be seen as sculptural counterparts to the ethereal simplicity of these late drawings, but ultimately Hesse was moving into a new direction with these works. In these late drawings intimate meditations reached a poignant clarity.

When Robert Smithson (1938–1973) developed the concept of site/non-site (Fig. 18), he not only dislodged the traditional sculptural object from its "pedestalized" position, but set up an historical rupture by dissolving critical boundaries that had constrained the object:

The strata of the Earth is a jumbled museum. Embedded in the sediment is a text that contains limits and boundaries which evade the rational order, and social structures which confine art. In order to read the rocks we must become conscious of geologic time, and of the layers of prehistoric material that is entombed in the Earth's crust. When one scans the ruined sites of prehistory one sees a heap of wrecked maps that upsets our present art historical limits. A rubble of logic confronts the viewer as he looks into the levels of sedimentation. The abstract grids containing the raw matter are observed as something incomplete, broken and shattered.... have developed the Non-Site, which in a physical way contains the disruption of the site. The container is in a sense a fragment itself, something that could be called a three-dimensional map. Without appeal to 'gestalts' or 'anti-form,' it actually exists as a fragment of a greater fragmentation. It is a three-dimensional perspective that has broken away from the whole, while containing the lack of its own containment. There are no mysteries in these vestiges, no traces of an end or a beginning.

Discussed by certain critics as "postmodern," Smithson invaded the sculptural arena with language text and mixed media. <sup>19</sup> He undermined the integrity of the isolated sculptural object with an ideological strategy that was temporal, geologic, and timeless. By relocating the sculptural idea within a greater cosmological field, he stepped outside of what he considered to be "a kind of false view of art history, an attempt to set up a lineage." Smithson courted entropy the way most people presuppose order and structure it in their lives. He embraced its artistic possibilities because it offered up more questions than answers.

Smithson's interest in geologic time developed early on and gradually displaced his initial involvement with Abstract Expressionist painting à la Pollock and Willem de Kooning, what he later referred to as a "lurking pagan religious anthropomorphism." From an obsessive preoccupation with Christianity, martyrdom, and personal angst, Smithson stepped outside himself in a series of mixed-media collages executed between about 1961 and 1963 (Fig. 19). Informed by natural sciences and science fiction, these playful images address serious philosophical issues: man's place or displacement within a greater natural order. As Smithson refined his terminology and developed a clearer sense of mission, he never lost the childlike curiosity and poignant wit that characterizes his early work. In fact, the collision of humor and profundity remained a salient aspect of his art, and the strong spiritual center that had fired up his earliest paintings and drawings was relocated in monumental earth works that carried a host of mythological associations both personal and universal.

At the core of Smithson's work, both his earth works and his non-sites, is an affirmation of change and dissolution brought on by time. In his world view entropic systems triumphed over uto-



Fig. 19
Robert Smithson
Untitled 1961–1963
Gouache/crayon, collage
18×18-3/8 inches
Courtesy of the estate of the artist and
John Weber Gallery, New York
Not in exhibition

pian dreams of a mechanistic order. In this respect his sensibility is similar to Roszak's. Disillusioned by the questionable "progress" of culture (atomic weaponry on the one hand and the Vietnam War on the other), both artists saw the absurdity of scientific and political "rationalism" and sought to reveal a continuity of experience through history and myth. <sup>20</sup> Although the means by which each sculptor realized his objectives were diverse-Roszak within a traditional "object" mode; Smithson within an expanded phenomenologyboth maintained a critical stance or aesthetic skepticism in their work. Smithson's skepticism had a Cartesian inflection that led to his being associated with Marcel Duchamp. While he acknowledged Duchamp's importance in laying the groundwork for a postmodern sensibility, the Frenchman's obsession with a mechanistic world view was incompatible with his own:

Duchamp was suspicious of this whole notion of mechanism, but he was using it all the time. I don't happen to have a mechanistic view of the world so I really can't accept Duchamp in terms of my own development. There is a great difference between a dialectical view and a mechanistic view. Andy Warhol saying that he wants to be a machine is this linear and Cartesian attitude developed on a simple level. And I just don't find it very productive. It leads to a kind of Cartesian abyss. <sup>21</sup>

Unlike Duchamp, Smithson located his dialectic within a natural order. In his selection of sites he may have opted for areas on the fringe, "backwater sites" less than desirable to most people, but his purpose was neither recreational nor commercial per se. By locating a site within the landscape the sculptural idea was reconstituted and a sense of place (dislodged by modernism) restored. Smithson's dialectic between site and non-site generated an endless number of variables and inexplicable occurrences. Ultimately, time held the upper hand in his master plan, and one is left to contemplate sculpture as an infinite continuum.

## Notes

Theodore J. Roszak, "Some Problems of Modern Sculpture," *Magazine of Art*, 42, pp. 55–56. Reprinted in *7 Arts*, Fernando Puma, ed. Colorado: The Falcon's Wing Press, 1955, pp. 64–65.

2 D'Arcy Wentworth Thompson, *On Growth and Form*, J.T. Bonner, ed. Cambridge, England: Cambridge University Press, 1971, p. 11.

3
"Theodore Roszak," Dorothy C. Miller,
ed. New York: The Museum of Modern
Art, 1946, p. 59.

4
"Theodore Roszak," The New Sculpture: A
Symposium, February 12, 1952, ms. transcript, Archives, The Museum of
Modern Art, New York, p. 11. Besides
Roszak, other sculptors represented on
the panel included David Smith, Herbert Ferber, and Richard Lippold.

5 Ibid., p. 14.

Albert Einstein, "A Message to Intellectuals (1948)," Essays in Humanism. New York: Philosophical Library, 1950, pp. 24–25. This paragraph, taken from a longer address that Einstein delivered at the Intellectual's Conference for Peace, was initially objected to by the Organizing Committee and subsequently released to the press on August 29, 1948.

7
The New Sculpture: A Symposium, op. cit.,
p. 18. Reprinted (in part) Theodore
Roszak, "In Pursuit of an Image," in
Quadrum, November 1956, p. 54.

8 For example, see Jeffrey Weiss, "Science and Primitivism: Fearful Symmetry in the Early New York School," *Arts Maga*zine, March 1983, pp. 81–87.

9
Herbert Read, "The Vital Image," A Concise History of Modern Sculpture (New York: Praeger Publishers, 1964), pp. 163–228; and see Jack Burnham, "The Biotic Sources of Modern Sculpture," Beyond Modern Sculpture: The Effects of Science and Technology on the Sculpture of This Century. New York: George Braziller, 1968, pp. 49–108.

Quoted in an interview by Hubert Meeker, *Dayton Journal Herald*, January 13, 1968. Reprinted by Joseph Margolis, "Michael Lekakis and the 'Heuristics' of Creation," *Main Currents in Modern Thought*, March–April 1975, p. 108.

11 Michael Lekakis, "Aegean Sculpture, Pottery in the Metropolitan Exhibit," *Art World*, December 20-January 15, 1980.

12 By 1970, Vollmer's work was praised by some as, "ideas [illustrations of geometrical formulae] made into solid forms....work of quality and excellence" (Sol LeWitt, "Ruth Vollmer: Mathematical Forms," Studio International, December 1970, p. 256), and demeaned by others as "Diluted post-Bauhaus, warmed over into modestly scaled modern Minimal," (Emily Wasserman, "Ruth Vollmer: Review," Artforum, February 1969, p. 68). When exhibited, the later work was sometimes accompanied by written explanations and/or dictionary definitions that, according to another critic, "Seemed an unnecessary attempt to provide scientific credentials for forms that were interesting enough in themselves" (James R. Mellow, "New York Letter: Review," Art International, January 1969, p. 54.

Reply to a questionnaire from The Museum of Modern Art, New York, (1964–65), quoted by B.H. Friedman, "The Quiet World of Ruth Vollmer," Art International, March 1965, p. 28; "Ruth Vollmer," (typed ms., 1966, Artist's File, The Museum of Modern Art, New York).

A similar tack is taken by Jackie Winsor, who maintains a persistent dialogue with the "Minimalist" cube and continues to violate its integrity by burning, piercing, coloring, and manipulating its internal and external surfaces. Evidence of her hand becomes more prominent (as observed in her last show at Paula Cooper Gallery in February 1986) as her work becomes increasingly more enlivened.

15 Sol LeWitt, "Paragraphs on Conceptual Art," *Artforum*, June 1967, p. 80.

16 Cindy Nesmer, "An Interview with Eva Hesse," *Artforum*, May 1970, p. 59. In the future much of Hesse's work may have limited public exposure and require a controlled environment for its continued conservation.

18 Robert Smithson, "A Sedimentation of the Mind: Earth Projects," *Artforum*, September 1968, p. 50.

19 Rosalind Krauss, "Sculpture in the Expanded Field," October, Spring 1979, pp. 30–44; Craig Owens, "Earthwords," October, Fall 1979, pp. 121–130.

20 For Smithson, film provided a perfect medium for constructing myth through the random unification of fragmented images, see Elizabeth C. Childs, "Robert Smithson and Film: The Spiral Jetty Reconsidered," *Arts Magazine*, October 1981, pp. 68-81.

21
"Robert Smithson on Duchamp, An Interview," Moira Roth, *Artforum*, October 1973, p. 47.