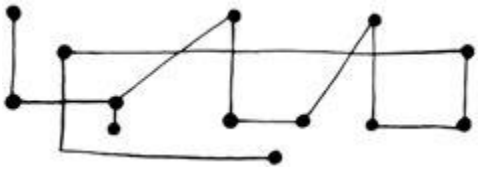




# THE MINIMALIST AESTHETIC IN THE PLASTIC ARTS AND IN MUSIC

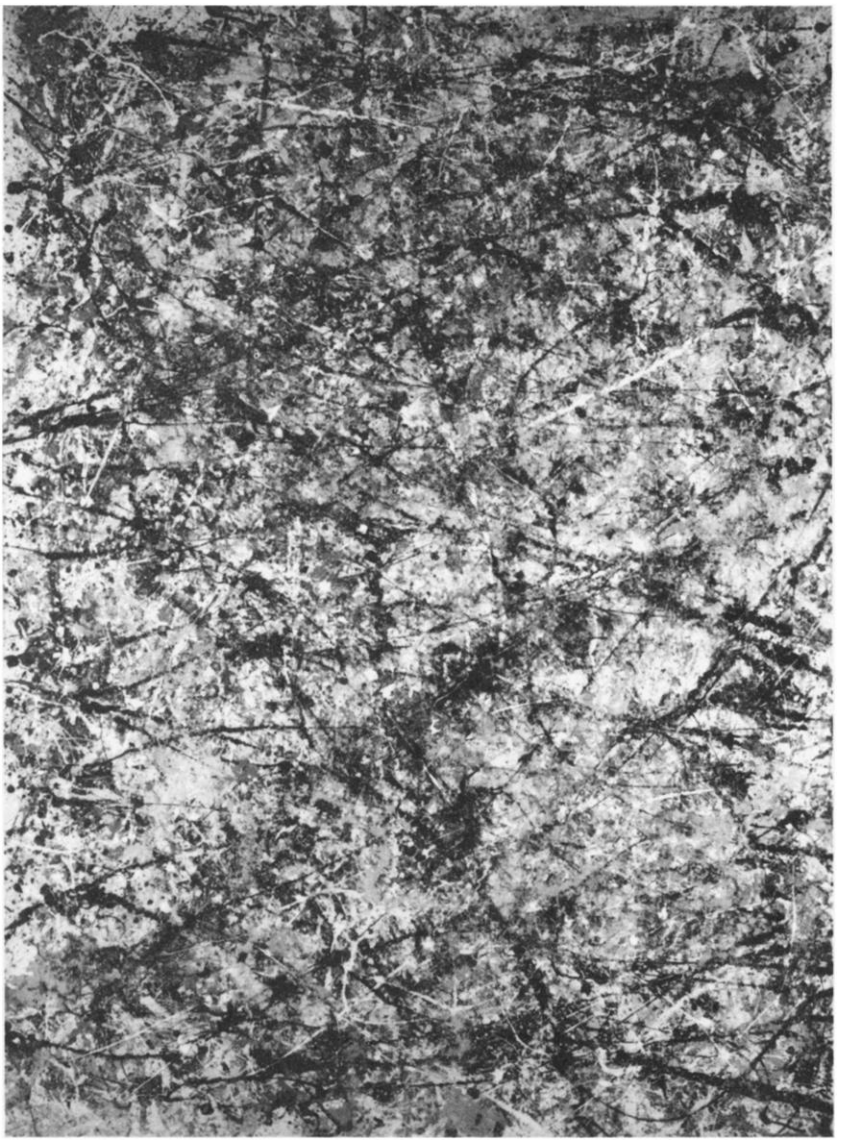
JONATHAN W. BERNARD

"MINIMALISM," AS A characterization of music composed by La Monte Young, Steve Reich, Terry Riley, and Philip Glass, among others, has been criticized for its inaccurate and misleading connotations. Wim Mertens, for example, asks whether "the extreme reduction of the musical means" implied by the term "is important enough to function as a fundamental characteristic of this music," and concludes that "*minimal music* is only partially satisfactory as a label for this tendency."[1] Mertens is typical of those who have written on the subject, however, in devoting no more than cursory attention to the meaning of minimalism in American sculpture and painting, where the term originated.[2] The circumstantial evidence linking minimalism in music to minimalism in the plastic arts has, of course, always been strong. Many of the earliest performances of Reich's and Glass's music, for instance, took place in art galleries and artists' lofts, and some of the earliest commercially available recordings of their music

were sponsored by galleries. The collaborative histories of individual figures, too, are well known: Glass with Richard Serra, Young with Robert Morris; the second performance of Reich's *Pendulum Music*, at the Whitney Museum in New York in 1969, featured three minimalists from the visual arts among its four performers.[3] In retrospect, actually, it is interesting that no one seems to have thought to apply the term *minimal* to this music, at least in print, before Michael Nyman did it sometime in the early 1970s.[4] It is even more interesting that this transference does not seem to have instilled music critics with a desire to find out what minimalism had come to mean to the art world since it was first coined in the mid-1960s or so (perhaps originally with derogatory intent). The label, after all, has stuck in a way that such terms as "phase-shifting," "repetitive," "systems" or "systemic," "process," or "trance" music never did. Why was this so? One certainly won't find out from the composers, who followed the artists in vehemently (and perhaps understandably) denying that their work deserved to be pigeonholed in this way. And for the most part the critics have either lavished unqualified praise upon the music simply for its newness and "accessibility" or have derided it for its supposed shallowness.

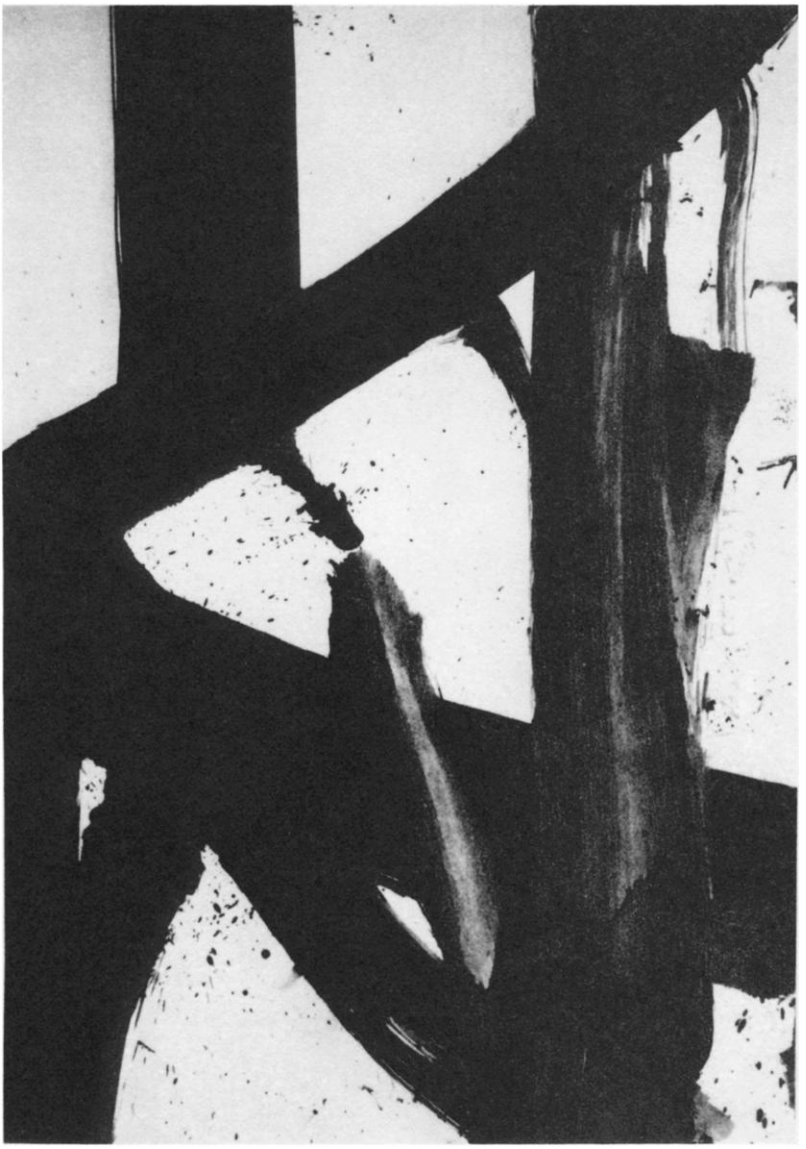
As it becomes clearer, with the passage of time, that minimalism was no mere flash in the pan, musicians ought to have correspondingly more stake in establishing its aesthetic basis. The prospects for meaningful discussion and analysis of this music are really rather dim if informed by little or no idea of what might lie behind certain composers' attempts at such a radical departure from the music they grew up on and the styles they were trained to emulate. In this respect we have a lot to learn from art criticism, where minimalism has for some time been the object of detailed and intense scrutiny. Accordingly, this article has two closely related aims: first, to show that the term *minimal* is not at all inappropriate to the music of certain composers when construed according to its meaning in the plastic arts; second, to show how the language developed by art critics to treat minimalism can be adapted to furnish an essentially workable basis for analysis and criticism of minimalism in music.

Part of what minimal music shares with minimal art is the nature of its immediate predecessors. The reigning style of the fifties, abstract expressionism, was characterized—especially in painting—by a high degree of gestural spontaneity which vividly conveyed the presence of the artist *in* the work. This quality went by various names, such as: "painterly abstraction," which signified the explicit record of brushwork or other means of paint application as the vehicle of creation; "action painting," which attempted to capture the improvisational, work-it-out-as-you-go-along nature of the technique; and "all-over art," which called attention to the painter's use of the entire canvas all at once (Examples 1 and 2). Both of the last two, in particular, were epitomized in Jackson Pollock's drip technique and his method of laying the canvas flat on the floor and walking around it,



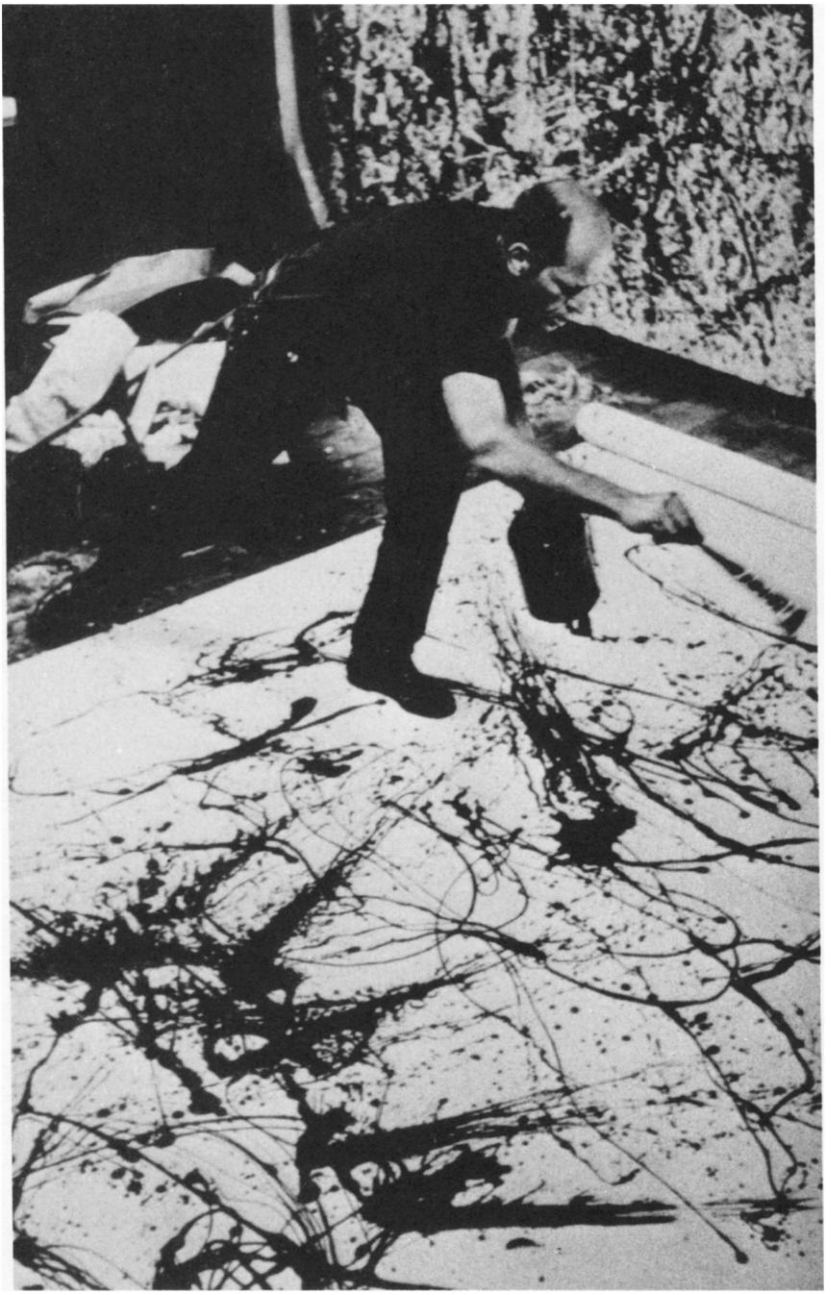


EXAMPLE 1: JACKSON POLLOCK, *Number 1, 1950 (Lavender Mist)* (1950). OIL, ENAMEL, AND ALUMINUM PAINT ON CANVAS, 87″ × 118″





EXAMPLE 2: WILLEM DE KOONING, *Black and White Rome (Double-Sided Single L)* (1959). OIL ON PAPER, 28″ × 40″



EXAMPLE 3: JACKSON POLLOCK PAINTING (EARLY 1950S)

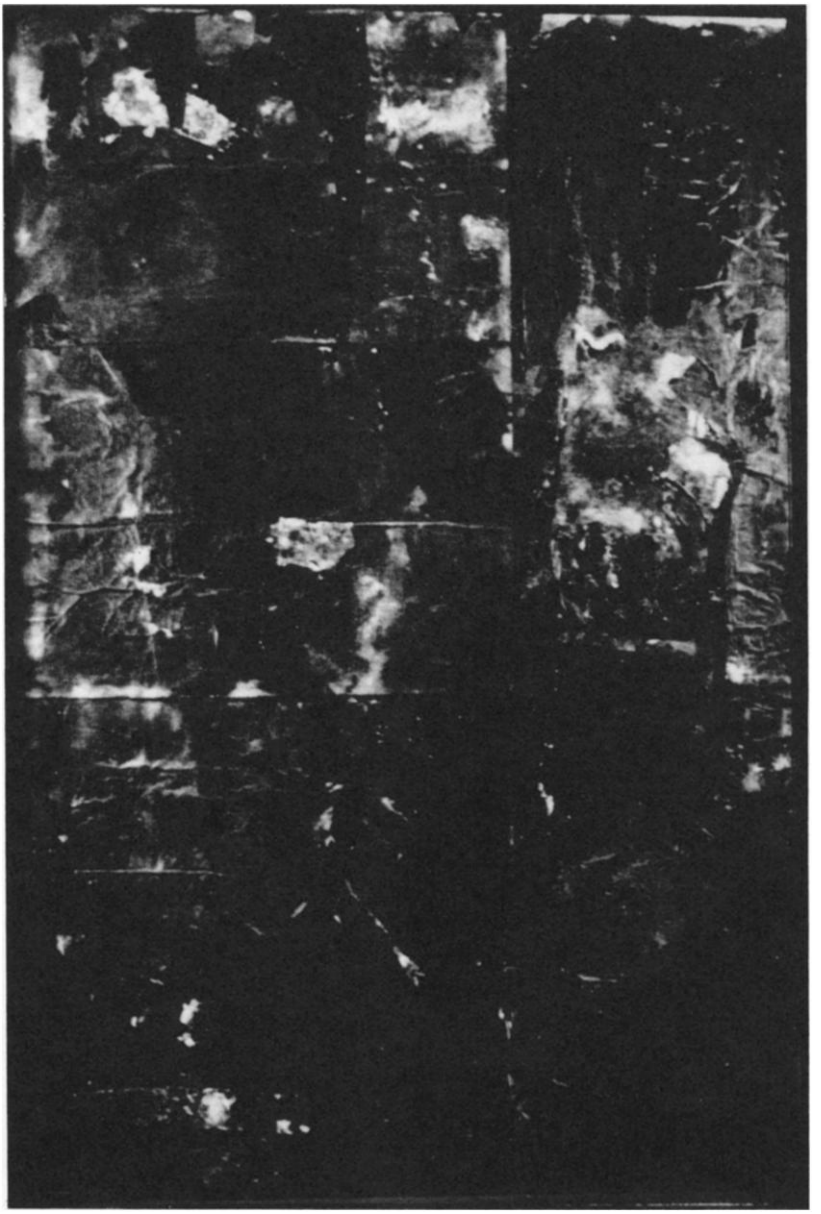
working as he did so (Example 3).[5] All of these descriptive labels connoted an exaltation of the intuitive and the unpredictable as functions of the artist's own personality.

In its focus upon the gestural and the accidental—and in its violent break with the past—abstract expressionist art bears a good deal of resemblance to the work of John Cage, Morton Feldman, and Earle Brown from the early fifties onward. All three of these composers incorporated chance-based methods into their music, either as a matter of compositional process, or as a vehicle for performance, or both.[6] In fact, there is extensive documentation of the mutual influence that art and music exerted during this decade. Cage is often cited as a seminal figure in writings on the visual arts,[7] while Feldman has described in some detail what he feels he learned from painters. For instance, he has likened his "'all-over' approach to the time-canvas" in his graph-paper scores to Pollock's similarly named approach, and he has spoken of the control that one can exert by being in the work of art as the only kind of control worth having.[8] More extensive and revealing is his discussion of a large black painting by Robert Rauschenberg, in which newspapers (also painted black) are glued to the canvas (Example 4). Feldman saw this work for the first time in the early fifties and immediately purchased it. He comments:

> After living with this painting and studying it intensely now and then, I picked up on an *attitude* about *making something* that was absolutely unique to me. . . . the Black Painting . . . was like Rauschenberg's discovery that he wanted "neither life nor art, but something in between." I then began to compose a music dealing precisely with "in-betweenness": creating a confusion of material and construction, and a fusion of method and application, by concentrating on how they could be directed toward "that which is difficult to categorize."[9]

This "confusion of material and its construction," this intrusion of life into art so that what resulted was neither wholly one nor the other is exactly what one would expect from an aesthetic in which explicit incorporation of the creator's personality was held to be of utmost importance.

As the fifties progressed, and increasingly as they drew to an end, some signs of rebellion against abstract expressionism became evident. In art, two particularly significant figures were Barnett Newman and Ad Reinhardt. Newman, in his so-called "stripe" paintings, put forth the idea, not only of a drastic simplification or reduction, but also of a literalism about the artwork that would become absolutely crucial to minimalism later on. Newman spoke of the object *as* object, of his works as "declaring the space" in which they operate.[10] A painting, he said, "is nothing more than a slice of space, a 'space vehicle,' which a painter gets into, and then has to get out of."[11] This statement bespeaks clearly an intention on



EXAMPLE 4: ROBERT RAUSCHENBERG, *Untitled* (1952–53)
OIL AND NEWSPAPER ON CANVAS. 72″ × 54″

Newman's part that nothing be left of himself in the painting once the painting is done. Reinhardt, for his part, took a more uncompromising tone: one of his Six Canons or "Noes" insists upon "No Expressionism or Surrealism" and that "'the laying bare of oneself,' autobiographically or socially, is obscene."[12] Further: "No accidents or automatism" and "Everything, where to begin and where to end, should be worked out in the mind beforehand."[13] Reinhardt's near-monochromatic canvases certainly do seem to have anticipated the minimalist painters' use of solid fields of color (Example 5).

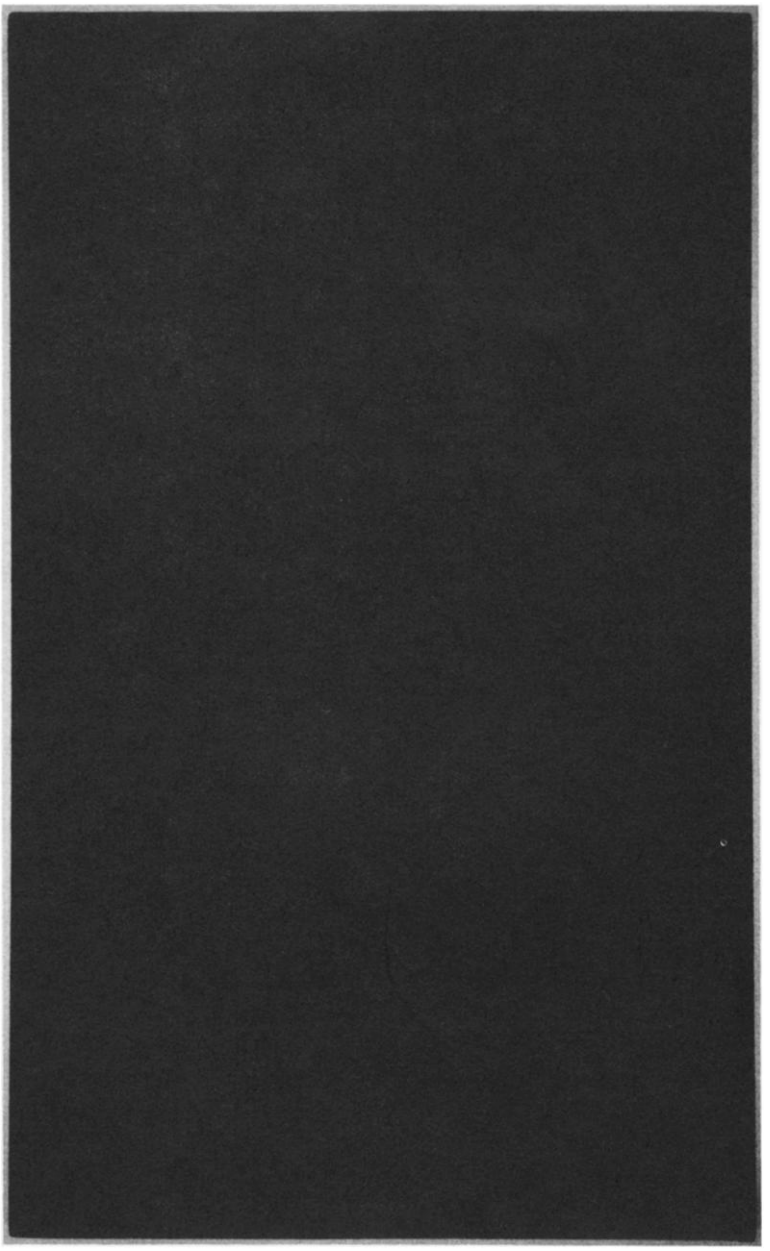
On the musical side, the activities of the Fluxus group were probably the most significant in the transition to minimalism. In his excellent treatment of the subject in *Experimental Music: Cage and Beyond*, Michael Nyman points out that the Fluxus composers "reviewed multiplicity, found its deficiencies, and chose to reduce their focus of attention to singularity."[14] This was very much an issue of control: the performance pieces which George Brecht called "events" bore only a superficial resemblance to the mixed-media "happenings" pioneered by Cage as early as 1952. As is well known, the happening was designed to promote spontaneity and unpredictable outcomes from the random intersections and collisions of simultaneously, independently executed activities. The austerity of Brecht's events stands in stark contrast to such abundance (Example 6).[15]

The reader will notice that these compositions do not by any means exclude variability from their realization or remove all powers of decision-making from their performers. However, the sheer range of possible outcomes has been severely reduced—and it has been done without retreating from the "wide-open" nature of aleatory, for these pieces continue to stretch the boundaries of what can be considered music. Further, these events have a curiously anonymous, or impersonal, aspect, as if anyone could have planned them—something which is really not true of Cage's pieces, despite his supposedly having removed himself from the proceedings. Is there anything, really, that categorically distinguishes Brecht's Fluxus pieces from La Monte Young's of about the same time? This impersonal quality is noticeable even as one recognizes the vigorously, almost aggressively distinct and original aesthetic that underlies them as their common ground.

As the sixties began, the definitive break from abstract expressionism in the plastic arts came at the hands of such younger artists as sculptor Donald Judd and painter Frank Stella, who had reached a point of intense dissatisfaction with this tendency of the personality to attract attention to itself. Stella recalls:

> I had been badly affected by what could be called the romance of Abstract Expressionism . . . the idea of the artist as a terrifically sensitive, ever-changing, ever-ambitious person. . . . I began to feel very

Photograph by Bill Jacobson, courtesy of the Pace Gallery



EXAMPLE 5: AD REINHARDT, *Abstract Painting* (1956)
OIL ON CANVAS. 15″ × 9″

**THREE TELEPHONE EVENTS**

- **When the telephone rings, it is allowed to continue ringing, until it stops.**
- **When the telephone rings, the receiver is lifted, then replaced.**
- **When the telephone rings, it is answered.**

**Performance note: Each event comprises all occurrences within its duration.**

**Spring, 1961**

**DRIP MUSIC (DRIP EVENT)**

**For single or multiple performance.**

**A source of dripping water and an empty vessel are arranged so that the water falls into the vessel.**

**Second version: Dripping.**

**G. Brecht**
**(1959-62)**

EXAMPLE 6: GEORGE BRECHT, *Three Telephone Events* (1961), AND *Drip Music (Drip Event)* (1959–62)

> strongly about finding a way that wasn't so wrapped up in the hullabaloo, or a way of working that you couldn't write about . . . something that was stable in a sense, something that wasn't constantly a record of your sensitivity. . . .[16]

The search for alternatives led to the adoption of various strategies: (1) the minimization of chance or accident; (2) an emphasis upon the *surface* of the work, by means of the absolutely uniform application of color—as if the ideal were an industrial paint job—or by other techniques that produced an exceptionally smooth, "machined" finish; (3) a concentration upon the whole rather than the parts—that is, upon arrangement rather than composition—and a concomitant reduction in the number of elements,

resulting in a spare, stripped-down look. Each of these is worth discussing in turn as it applies both to art and to music.

(1) Artists such as Stella and Judd understood very well that it was impossible to do away with chance or accident entirely—and that it was, in fact, not desirable to do so. But whereas Pollock and other abstract expressionists used actual chance, Judd felt that it made more sense to "use a simple form that doesn't look like either order or disorder"—like a box, for example, which "does have an order, but it's not so ordered that [order] becomes the dominant quality."[17]

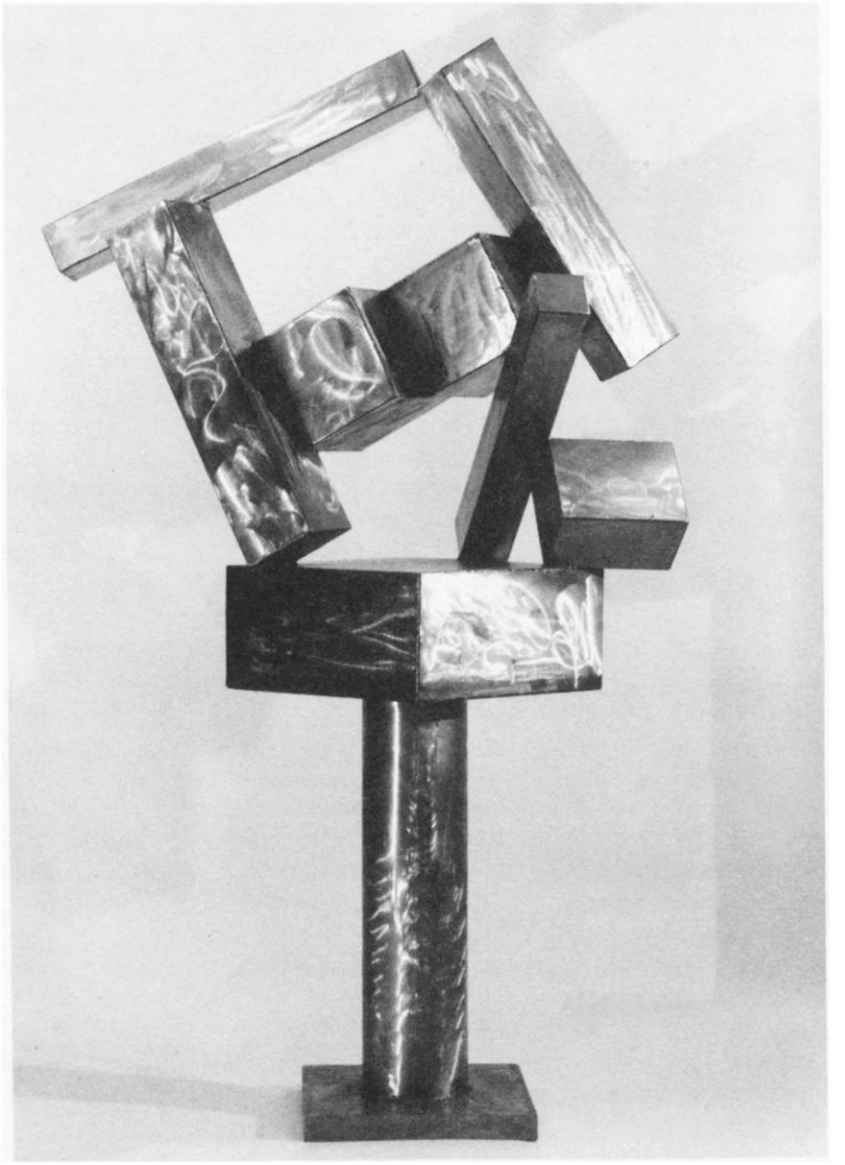
Likewise, several composers whose work could be termed minimal, either in whole or in part, show an interest only in severely restricting the scope of chance, not in eliminating it—but because the material itself has been drastically simplified, and because the formal constraints to which it is subjected are considerable, the result remains channeled within a relatively narrow range of possibilities. Three pieces will serve as apt illustrations of this facet of minimalism. First, in Terry Riley's *In C*, not only the number of players in the ensemble and its instrumentation, but also the exact timing of each player's rendition of the fifty-three figures juxtaposed with all the other renditions, are left unspecified. This timing is affected by the number of repetitions of a given figure by a given player, by the durations of rests allowed between repetitions of a figure or before proceeding to the next figure, and so on. However, because the sequence of fifty-three figures is absolutely fixed, and because the players are directed to remain aware of their fellows' progress, no single part should ever get *that far* out of line with the others. As Peter Gena has noted, "Riley thus implants a type of formal control along with the completely determinate source material."[18] A second example is La Monte Young's *The Well-Tuned Piano*, which has no score (or, at least, none that is available to anyone but the composer) and thus is performed only by Young himself. Here the desire for control over the aural result is exhibited in extreme form, though it is obviously the same impulse that has led Reich and Glass to found their own performing ensembles. According to Young, a performance of the work typically lasts between $3\frac{1}{2}$ and $4\frac{1}{2}$ hours—though even longer durations are not impossible[19]—but this temporal "play" is only, in fact, a matter of roughly proportional extension (or contraction) of the various sections. These sections are based on fixed harmonies that change from performance to performance only, apparently, in the speed with which they are unfolded and in the extent of the variations that form what Young calls the "microstructure" of the work. Young has mentioned that he almost always performs *The Well-Tuned Piano* with a clock handy to refer to, so that he won't "spend too long in one section and then not have enough time" for the rest of the work.[20] Finally, a third useful example of "constrained chance" is Frederic Rzewski's *Les Moutons de Panurge*. The performance procedure of

this piece, at least as Rzewski originally envisioned it, actually constitutes a witty comment on control, in that the exact synchronization that obtains at the beginning *must* disintegrate at some point if the sonic potential of the work is to be fulfilled. Just where this disintegration occurs is one variable in the total scheme; once it has occurred, however, the resultant "blurring" is not likely to drive the various parts all that far apart, even though there are no automatic constraints on such separation and even though the individual performers are directed, once synchrony has broken down, to "stay lost."[21]

It must be added, however, that for the minimalist composers, especially those whose careers effectively began in the early to mid-sixties, there was another, much more firmly entrenched methodology than that of Cage and his followers to oppose: serialism, which even by 1960 had itself only recently displaced the more conservative, neoclassical style of an earlier generation of American composers from its position of preeminence in the academy. One reason that the histories of art and music do not more closely parallel each other is surely because fashions change more quickly in the former than in the latter—and this has never been more the case than in the twentieth century. It is probably true that the minimalists, at least at the outset, regarded Cage et al. more as kindred spirits in some sense, less as an "establishment" to rebel against.[22] Nevertheless, it can be persuasively argued that the music of chance ultimately served the minimalists as a negative ideal, an example of what not to do, in their efforts to create a viable alternative to (what they came to see as) the needless and overly intellectual complexities of serialism.[23]

(2) The emphasis upon surface in minimal art is aimed in part at achieving an impersonal quality, avoiding the depiction of personality that most minimalist artists felt had become entirely too explicit. As painter Kenneth Noland put it, "The thing is to get that color down on the thinnest conceivable surface, a surface sliced into the air as if by a razor. It's all color and surface, that's all."[24] It is in this light that we understand Stella's striking remark, "I tried to keep the paint as good as it was in the can"—that is, in that same smooth, unworked state.[25]

Similar, or at least analogous, effects were registered in sculpture. David Smith's use of burnished steel, for example, served to convey the feeling that his works articulated a volume without actually occupying it, simply because the intense surface presence implied that the sculptures in question, despite their considerable size, were actually hollow (Example 7).[26] One critic notes further that "The smoothness and general uninflectedness of surface in a good many of the [new sculptural] pieces might stand as a metaphor for the general smoothing over of details of execution—a metaphor that becomes richer in light of the fact that some of the new work is produced according to specifications at a factory."[27] For some sculptors, in



EXAMPLE 7: DAVID SMITH, *Cubi XVII* (1963)
STAINLESS STEEL. $107\frac{3}{4}'' \times 64\frac{7}{8}'' \times 38\frac{1}{8}''$

fact, such as Robert Morris, the impression given by art objects that they had been *manufactured*—whether literally true or not—was crucial to breaking "the tedious ring of 'artiness' circumscribing each new phase of art since the Renaissance" and helping to remove the accompanying interposition of artist's personality between artwork and viewer.[28]

The simplification of musical materials that accompanies the suppression of chance procedures also results in the equivalent of a "shiny" or "nonpainterly" presence. This is manifest in several features. One is the limited repertoire of sound sources, whether they be taped or live; in the latter case, the harmonies favored are preponderantly consonances and "mild" dissonances. (The old tonal criteria are invoked here only for the sake of convenience; the music itself, by definition, need not have anything to do with common-practice harmony.) Another notable feature is the extensive use of repetition, whether or not in the service of gradually induced, barely perceptible change over time. Recourse to such a device, especially when combined, as is so often the case, with the projection of a constant, uniform pulse and a busy, bustling, or "buzzing" character, seems calculated to evoke a sense of flatness, to deny that there is anything *but* surface to engage the listener's attention.[29] Of course, if there really were nothing but surface to this music, one could only conclude that it was nonhierarchically based. Such a basis is evidently not an impossible one for visual art—to judge from the historical evidence—so perhaps it is not for music either. The possibility is worth pointing out, if only to suggest that it may account for the difficulties experienced by theorists in particular in accepting this music as worthwhile art. For now, it will suffice to keep in mind Morris's dictum that "Simplicity of shape does not necessarily equate with simplicity of experience."[30]

(3) The shift in emphasis from composition to arrangement in minimal art, or from parts to whole, seems to have come about as an attempt to communicate more directly and clearly. One way of doing this was to reduce the number of parts. Among the sculptors, Judd, Morris, and Carl Andre are particularly significant for the ways in which their work embodies this idea. Judd has been bluntly eloquent on the subject: "When you start relating parts, in the first place, you're assuming that you have a vague whole—the rectangle of the canvas—and definite parts, which is all screwed up, because you should have a definite *whole* and maybe no parts, or very few."[31] Andre got around the problem of relations between parts by using bricks of a fixed size, arranged (unmortared) in various ways: these came across as "regimented, interchangeable units" which "did not lend themselves to relational structures" because "any part could replace any other part" (Example 8).[32] *Arrangement* is taken here to imply "a preconceived notion of the whole," as opposed to *composition*, which "usually means the adjustment of the parts, that is, their size, shape, color, or

Photograph courtesy of Paula Cooper Gallery

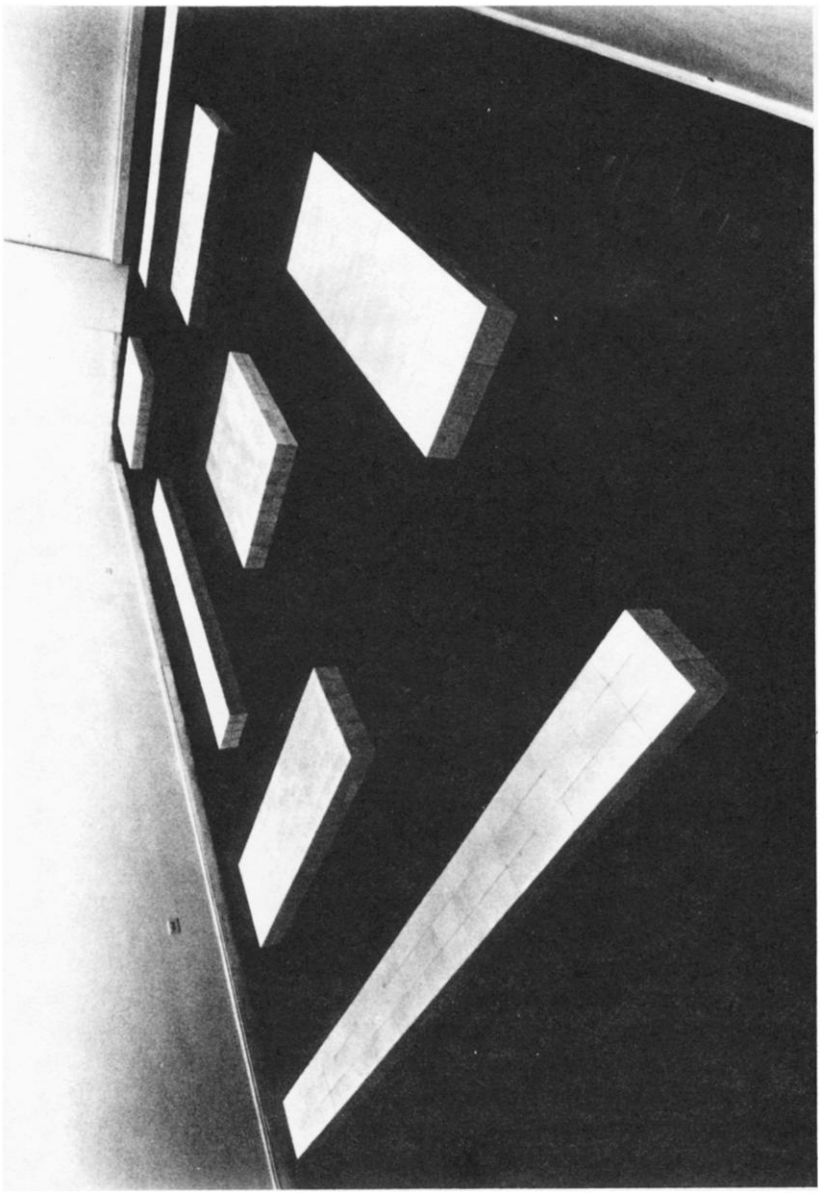
EXAMPLE 8: CARL ANDRE, *Lever* (1966). FIREBRICK. 400″
*Well* (1964/70). DIMENSIONS UNKNOWN
*Pyramid* (1959/70). DIMENSIONS UNKNOWN
(INSTALLATION AT THE GUGGENHEIM MUSEUM, NEW YORK, 1970)

placement, to arrive at the finished work, whose exact nature is not known beforehand."[33] The work illustrated in Example 9 is one of Andre's arrangements, a series entitled *Equivalents I–VIII*, in which the same number of bricks (120) is placed to form each of eight larger blocks, all two bricks high but varying in their other two dimensions. Still another solution was proposed by Morris:

> . . . Certain forms do exist that, if they do not negate the numerous relative sensations of color to texture, scale to mass, etc., do not present clearly separated parts for these kinds of relations to be established in terms of shapes. Such are the simpler forms that create strong gestalt sensations. Their parts are bound together in such a way that they offer a maximum resistance to perceptual separation.[34]

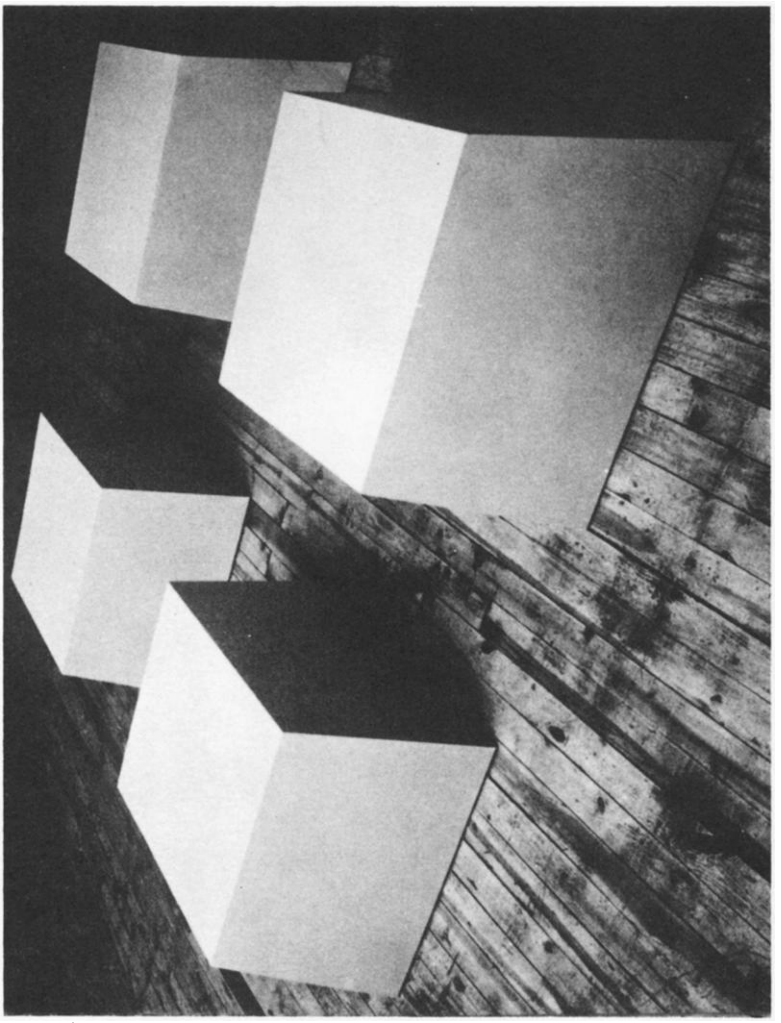
These "simpler forms"—the simple regular and irregular polyhedrons—Morris also called "unitary forms" for the fact that the viewer need not move around them to grasp the whole: "One sees and immediately 'believes' that the pattern within one's mind corresponds to the existential fact of the object" (Examples 10 and 11).[35]

In their efforts to direct the listener's attention away from the creative process expressed as something going on *in the work of art* and towards the actual *sound* of the finished product, the minimalist composers also stress the "wholeness" of their pieces. Cage's *Indeterminacy* serves as a useful foil in this case; it is a work that is about nothing if not its own creation. The fact that in the well-known Folkways recording it is Cage himself whose voice we hear might at first seem crucial to our sense that the piece is being created as we hear it; but it is not the *literal* presence of the composer's voice that makes this piece what it is, as will be clear from a comparison of *Indeterminacy* with Alvin Lucier's *I Am Sitting in a Room*. Lucier's work, for which the recorded, re-recorded, re-re-recorded, etc. sound of his own voice serves as the sole material, is only superficially "about" its creation; actually, even the listener who has never seen the "score" will soon realize—having heard the text through a few times—that the compositional decisions were all made before the beginning of the work—that in fact they preceded the moment at which the composition could be said, even conceptually, to have begun. In *Indeterminacy*, it is the individual elements that capture our attention: Cage's anecdotes and aphorisms spoken at various speeds and David Tudor's sporadic, improvised piano and electronic "accompaniment."[36] In *I Am Sitting in a Room*, by contrast, as the piece goes on we pay less and less attention to the individual links in the chain—the concatenated readings of the text—and more and more to the whole progression from the voice in the room to "the room in the voice," as it were.[37]



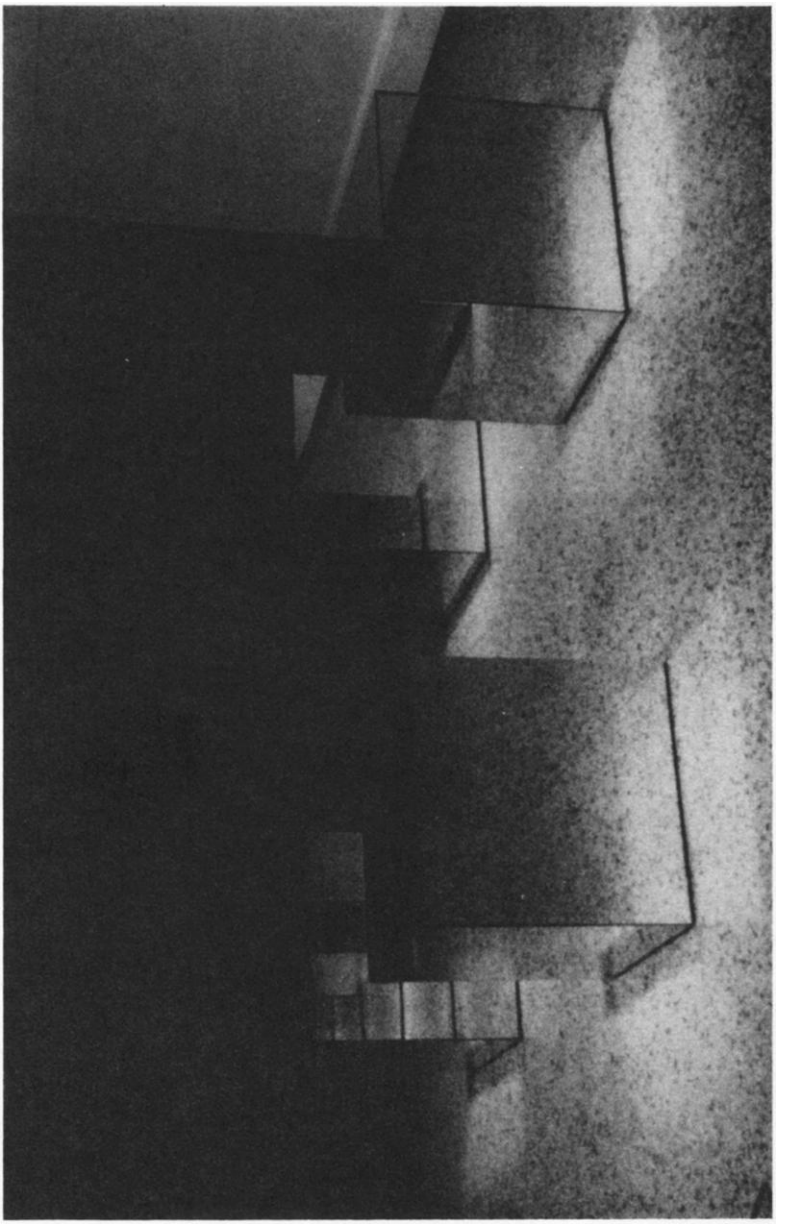
Photograph courtesy of Paula Cooper Gallery

EXAMPLE 9: CARL ANDRE, *Equivalents I–VIII* (1966). SAND-LIME BRICKS, EACH $2\frac{1}{2}'' \times 4\frac{1}{2}'' \times 9''$ (INSTALLATION AT THE TIBOR DE NAGY GALLERY, NEW YORK)



Photograph courtesy Sonnabend Gallery, New York

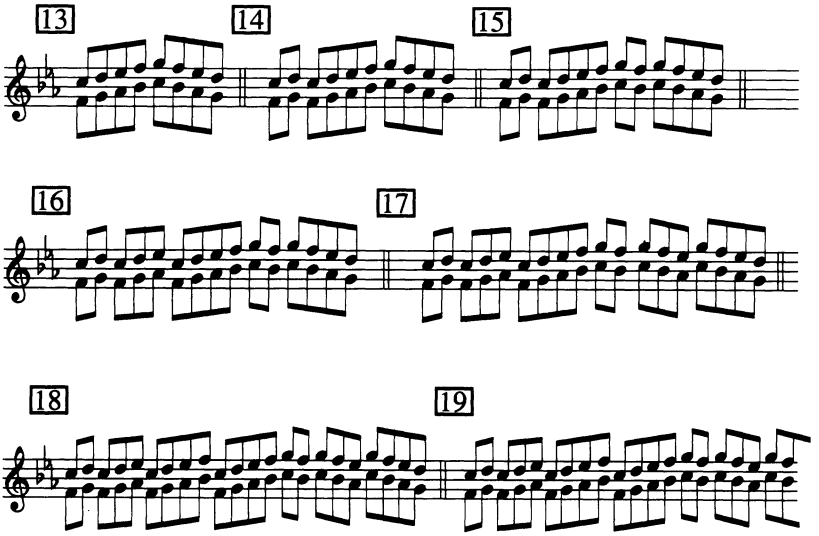
EXAMPLE 10: ROBERT MORRIS, *Untitled* (1965). FIBERGLASS. FOUR PIECES, EACH 24″ × 36″ × 36″



Photograph courtesy Sonnabend Gallery, New York

EXAMPLE 11: ROBERT MORRIS, *Untitled* (1965). PLEXIGLASS MIRROR ON WOOD. FOUR PIECES, EACH 28″ × 28″ × 28″

One other interesting illustration in music of the opposition between arrangement and composition could be mentioned at this point. Among the ideas about musical time that Glass, by his own account, acquired from his study of Indian music is the assemblage of a larger whole from a string of smaller values. Glass sees this as a basically Eastern idea, diametrically opposed to the Western practice of dividing a given span as if one were slicing a loaf of bread.[38] Whether or not this is a valid distinction, it does resonate interestingly with the ideas of minimalist artists in this area. In a piece like his *Music in Fifths* (1969) (see Example 12),[39] where for instance from measure 13 to measure 19 there is a progressive lengthening of the initial simple ascending-descending motion, one sees that this "gradual accretion of musical material," as Glass puts it,[40] is calculated to minimize the possibility that the listener will recognize the added notes each time as separate elements: as soon as they are heard, they become indivisibly integrated with the whole unit. This happens in part because of the unbroken stream of eighth-note pulses, in part because the added notes are not actually "new," being simply repetitions of notes already in the unit.




EXAMPLE 12: PHILIP GLASS: *Music in Fifths* (1969), MEASURES 13–19

The simplification inherent in reducing the number of parts in a work also seems very much related to the spiritual, meditative qualities of minimalism: simplification in the service of the search for truth. This less aggressive, less public side of minimalism is revealed most clearly in the work of painters like Jo Baer and Agnes Martin.[41] Martin's orientation is evident, too, from her own words: ". . . we all have the same experience and the same concern, but the artist must know exactly what the experience is. He must pursue the truth relentlessly. Once he sees this fact his feet are on the path. If you want to know the truth you will know it. The manipulation of materials in art work is the result of this state of mind. The artist works by awareness of his own state of mind."[42]

A corresponding aesthetic is not difficult to discern in the music of Young and Riley, at least; their common background as students of Pandit Pran Nath is surely significant in this regard. One thinks also of certain works by Pauline Oliveros, such as *Horse Sings from Cloud* (1975–77). It is this meditative quality, perhaps, that has led some critics to characterize minimal music as essentially static.[43] More to the point, though, is H. Wiley Hitchcock's mention of the "lack of dramatic devices" such as "contrast, opposition, argument, climax, patterns of tension and release, sense of development" in minimal music, or John Rahn's observation, concerning Glass's operas, of "the absolute avoidance of conventional expressivity in the music and its reliance on very large-scale rhythmic structures of an almost frightening asceticism."[44] It is the *absence* of certain devices traditionally applied to the structuring of time that has the potential to disorient, to lend the impression that time has stopped altogether, or that the music exists somehow beyond or outside of time. Indeed, the minimalist composers, with their extensive use of repetition and of vaguely "tonal-sounding" harmonies in nontraditionally functional ways, have managed to construct a temporal frame of reference previously unknown—to Western music, at any rate. But "stasis" is precisely the wrong word to describe a music that (as will be argued at length below) depends so heavily upon time as a vehicle.

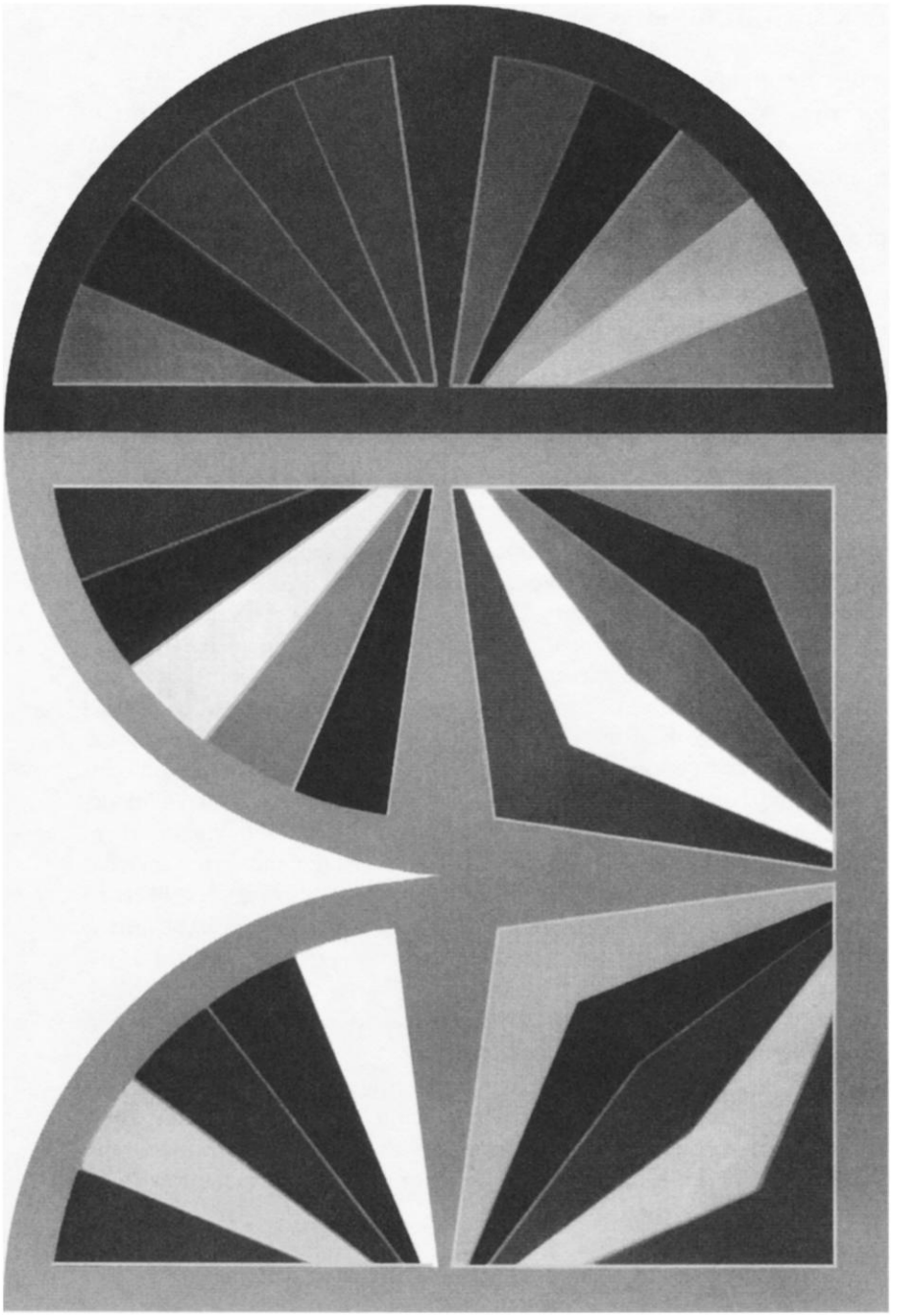
In minimal art, the idea of mystery, of depths that might be alluded to but were in the end hidden from the viewer, is rejected. Stella has been quite clear on this point: "My painting is based on the fact that only what can be seen there *is* there. It really is an object. . . . What you see is what you see."[45] And: "I wanted something that was direct—right to your eye . . . something you didn't have to look around—you got the whole thing right away."[46] Certain techniques came into use that promoted the "objectness" of the painting, such as the thick stretcher, which had the effect of making quite literal the flatness of the canvas by lifting it away from the wall it was hung on, and the shaped canvas, in which diagonally

opposite corners were lopped off or other alterations were made to get away from the standard rectangular format, producing a shape which became identical in dimensions to the image (Example 13). Similarly in sculpture, Judd's and Morris's "elementary, geometrical forms . . . depend for their art quality on some sort of presence or concrete thereness. . . . There is no wish to transcend the physical for either the metaphysical or the metaphoric. The thing, then, is presumably not supposed . . . to be suggestive of anything other than itself."[47] Judd himself preferred to call work that exhibited such qualities "three-dimensional art"—neither painting nor sculpture but "related, closely or distantly, to one or the other"—or, even better, "specific objects."[48]

The desirability of directness of image is certainly evident in the artistic credos of minimalist composers, notably Reich's essay, "Music as a Gradual Process," in which the author begins by explaining his title: "I do not mean the process of composition, but rather pieces of music that are, literally, processes. . . . I am interested in perceptible processes; I want to be able to hear the process happening throughout the sounding music." Further, says Reich of his method, "once the process is set up and loaded it runs by itself"—a feature which acts to remove its inventor from the scene actually unfolded in the music.[49] Reich is also careful to point out the distinction between Cage's use of process and his own: "The processes he used were compositional ones that could not be heard when the piece was performed."[50] Again with reference to *Indeterminacy*, it would seem that although the experience of listening to such a piece is intended to parallel the process of creating it—in that one follows the accumulation of the result, moment by moment—one is provided with nothing to go on concerning the basis on which the creative decisions were actually made. Unable to determine what the larger plan might be—or even whether there *is* a larger plan—listeners are far more likely to focus their attention on what might be called the "eternal present" of the individual stories, less likely to attempt to make sense of the whole. Thus a kind of stasis is established—apparently much like the stasis that Feldman claims to have brought to his own work by studying the paintings of such abstract expressionists as Mark Rothko and Philip Guston, for he sees in his compositional aims a denial of process—in fact, an explicit opposition to it.[51]

Reich's idea of *process* is especially interesting in light of the fact that minimalist artists sought to introduce a kind of temporality into their work. Morris notes: "Only one aspect of the work is immediate: the apprehension of the gestalt. The experience of the work necessarily exists in time."[52] As Maurice Berger comments:

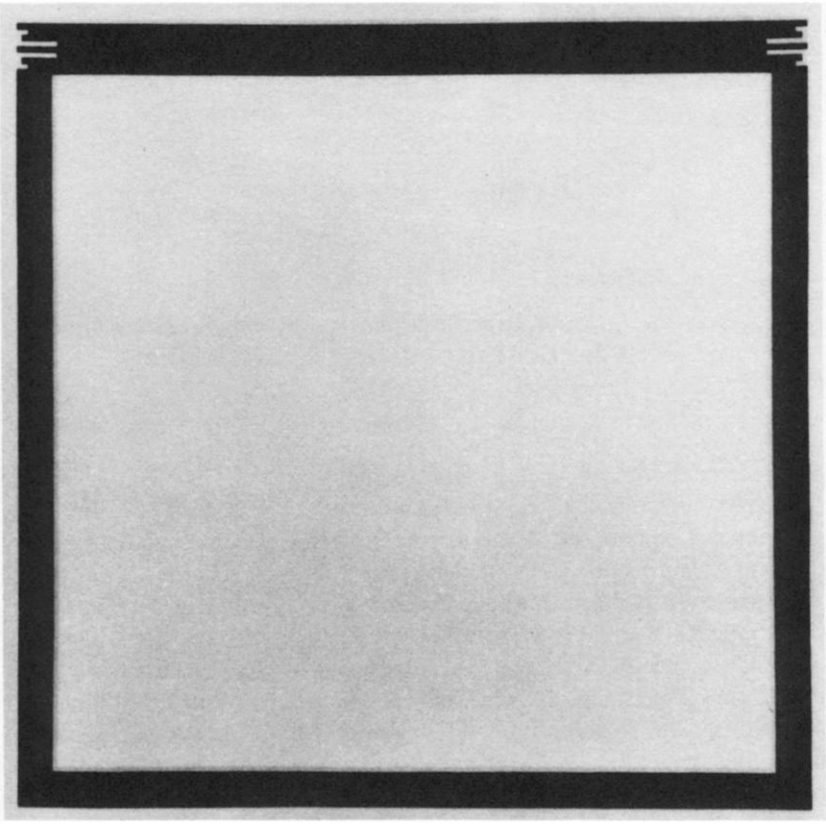
> In [Morris's] *Untitled*, 1965 [see Example 10], an arrangement of four identical cubic forms, two sides of each cube were sloped in order to



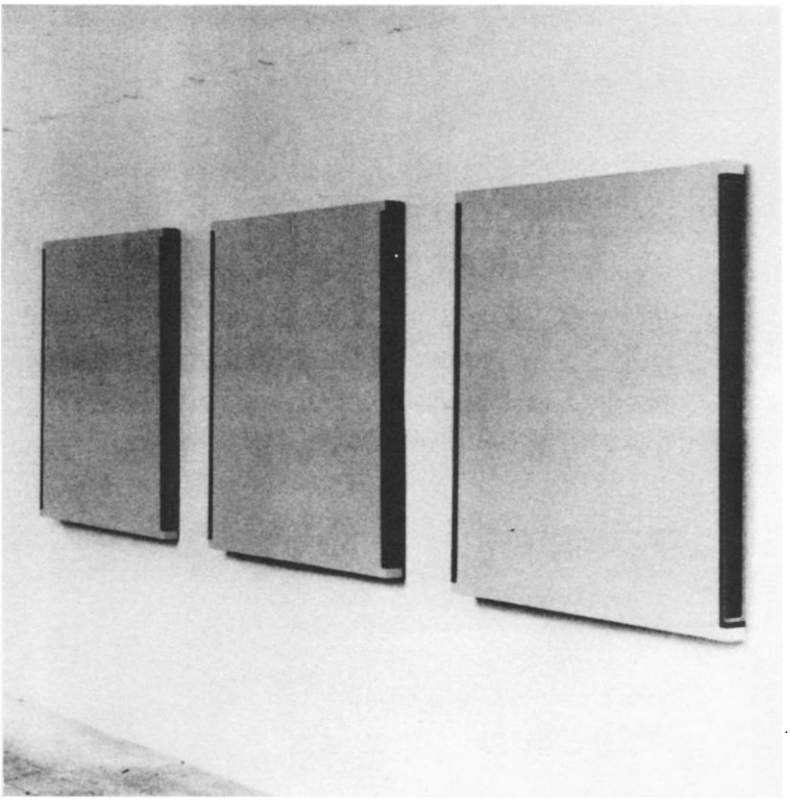
EXAMPLE 13: FRANK STELLA, *Gwr III* (1968). FLUORESCENT ALKYD ON CANVAS. 120″ × 180″

> question the strength of the known shape—the gestalt—while at the same time making that strength even more visible by affirming the impulse to see the shape as a cube (despite the displacement of one of its sides). . . . The altered gestalt of *Untitled* prevents the spectator from immediately apprehending the individual shapes in the arrangement; one has to move around the piece *in time* to fully understand its nuances.[53]

In painting, the thick stretcher became a vehicle for this sort of temporal quality as well—as for example in the work of Baer, whose entirely flat banded paintings of the sixties (Example 14) evolved into "wraparound" works in the seventies (Example 15). Thus the artist effectively "demands that the viewer abandon a static position and physically move around to see the work."[54]

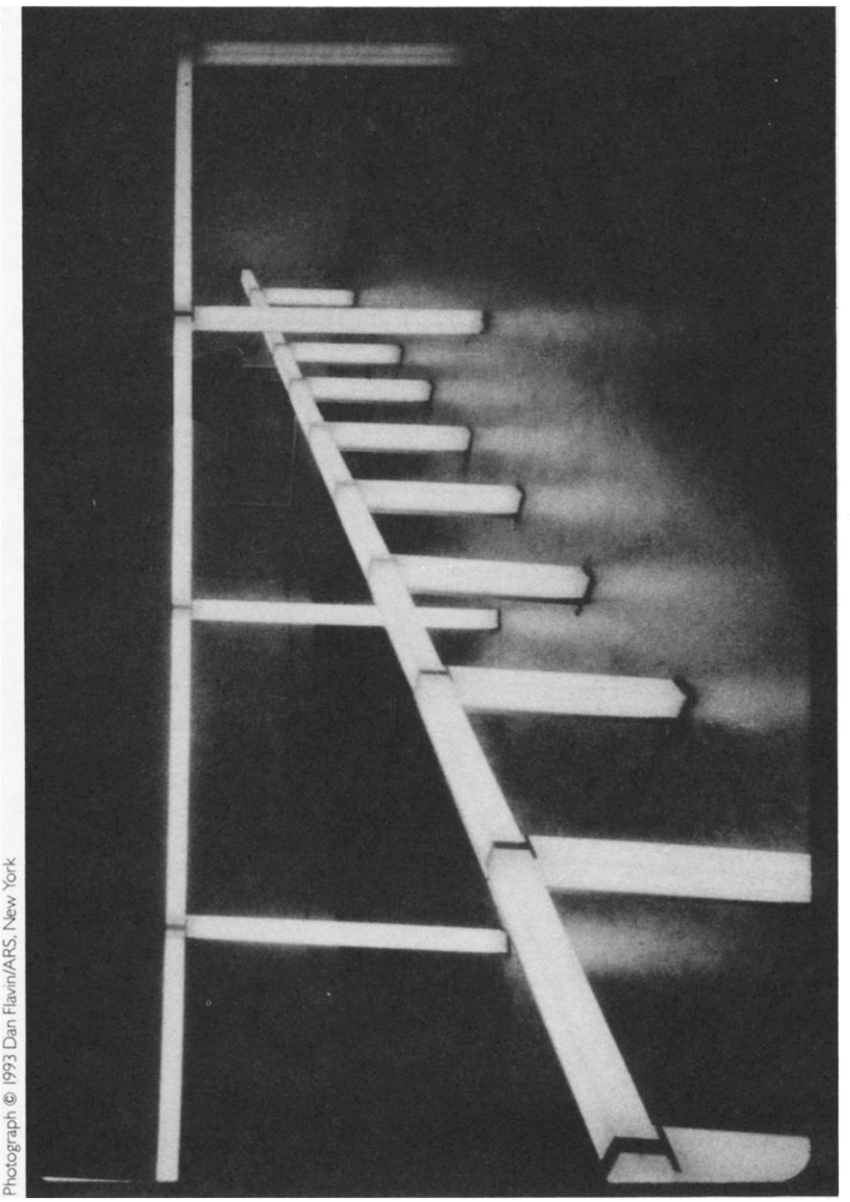


EXAMPLE 14: JO BAER, *Untitled* (1962). OIL ON CANVAS, 72″ × 72″



EXAMPLE 15: JO BAER, *Untitled (Wraparound Triptych—Blue, Green, Lavender)* (1969–74). OIL ON CANVAS. THREE PANELS, EACH 48″ × 52″

Temporality was also often expressed in a modular or serial fashion—"one thing after another," in Judd's often quoted phrase. The "things" in question are sometimes identical, sometimes of extremely limited range; certain of Dan Flavin's pieces which consist entirely of fluorescent tubes in a few standard lengths (Example 16) are a good example of the latter.[55] In either case, they are arranged to produce gradual changes (or, sometimes, only the slightest of variation) from module to module, whether within an exhibition space (sculpture; see Example 17) or across a grid or other field (painting). The seemingly rigid constraints of grids can be overcome through various strategies, such as those adopted by Martin: "She sets up a play of irregularizing refinements, which never become deviations from the prescribed system. . . . Thus the legibility of the system is preserved, the presence of the module never in doubt, although it supports not only a





EXAMPLE 16: DAN FLAVIN, *Greens Crossing Greens (for Piet Mondrian Who Lacked Green)* (1966)

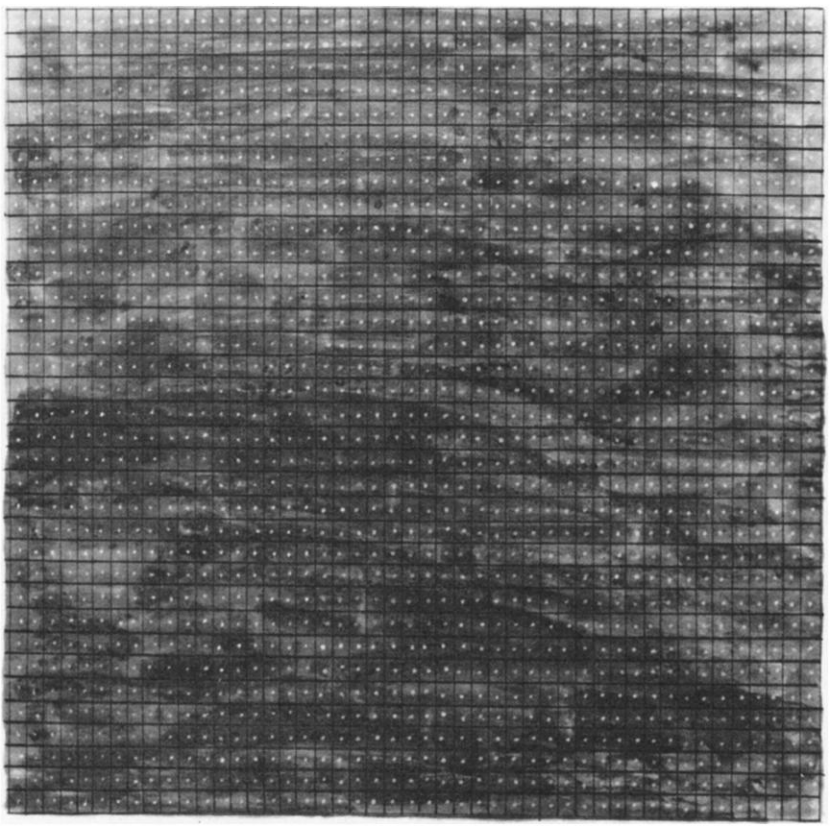
Photograph by John D. Schiff, courtesy John Weber Gallery, New York

EXAMPLE 17: ROBERT SMITHSON (LEFT TO RIGHT):
*Terminal* (1966). PAINTED STEEL. 52 1/2″ × 36″ × 56 1/2″
*Doubles* (1966). PAINTED STEEL. DIMENSIONS UNAVAILABLE
*Plunge* (1966). PAINTED STEEL. TEN UNITS, SQUARE SURFACES
14 1/2″ TO 19″, IN 1/2 –INCH INCREMENTS
(INSTALLATION, DECEMBER 1966)

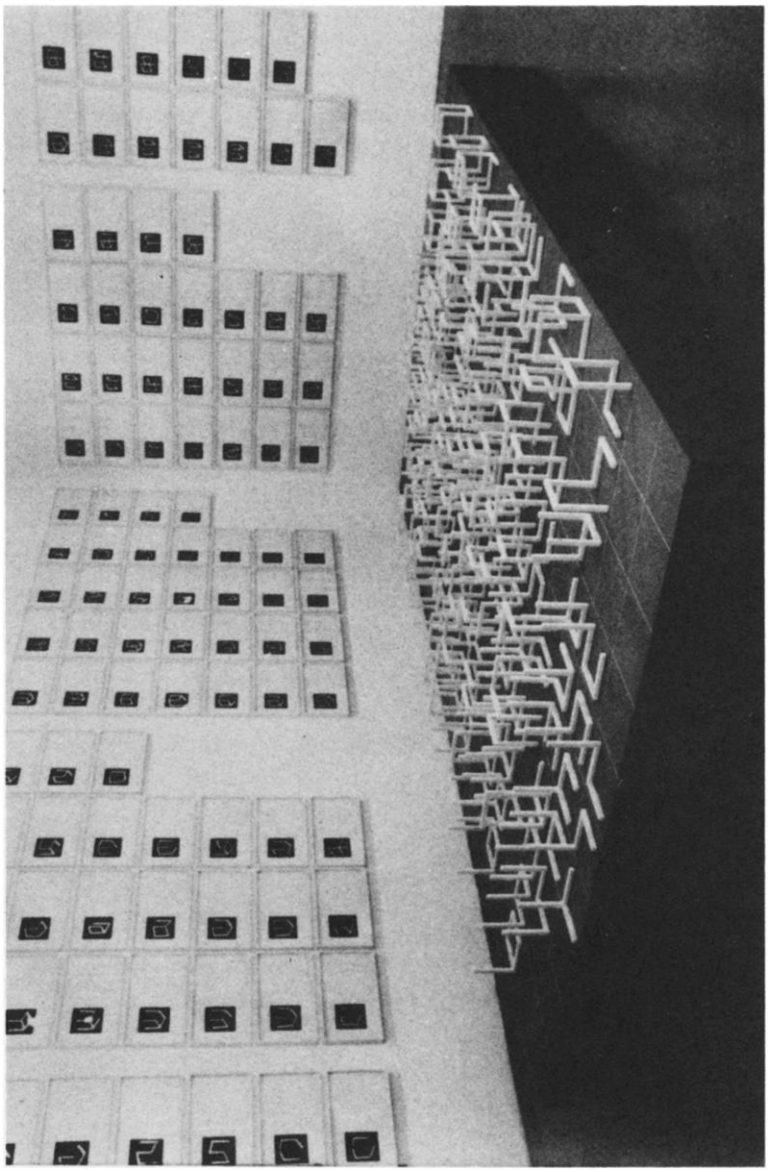
proposition concerning order but unpredictable physical variation as well"[56] (Example 18). This view agrees closely with the results of the minimalists' new, selective mode of listening as described by Nyman: "In Webern one perceives sameness out of (apparent) variety; while in Young's, Glass's, or Reich's music one perceives variety out of (apparent) sameness. . . ."[57]

Serially conceived art often involves a methodical working out of all the possibilities encompassed by a governing set of initial decisions. The 122 wood sculptures in Sol LeWitt's *All Variations of Incomplete Open Cubes*, for example (Example 19), range in number of edges from three (the minimum required to establish three dimensions) to eleven (the maximum possible

Photograph by Ellen Page Wilson, courtesy of the Pace Gallery



EXAMPLE 18: AGNES MARTIN, *Untitled* (c.1965)
WATERCOLOR, INK, AND GOUACHE ON PAPER, 9 1/4" × 9 1/4"



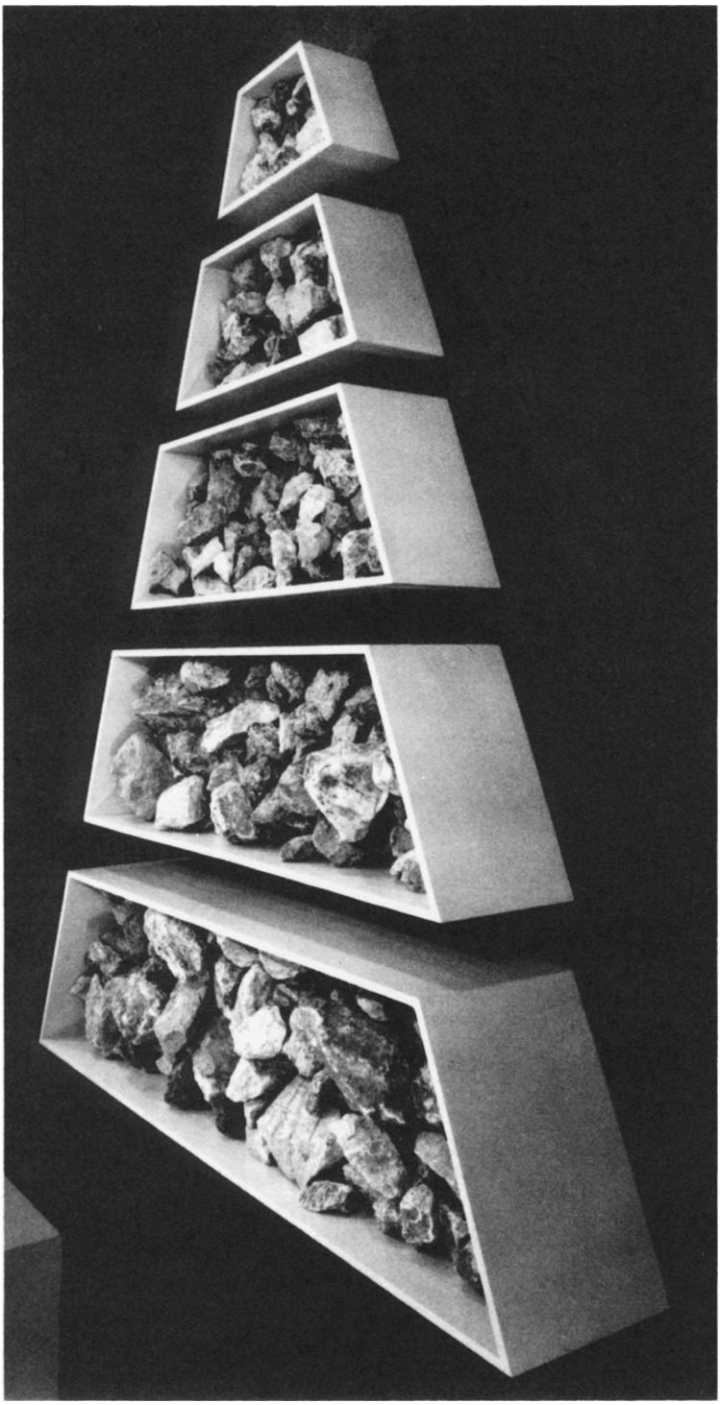
Photograph courtesy John Weber Gallery, New York

EXAMPLE 19: SOL LEWITT, *All Variations of Incomplete Open Cubes* (1974)
122 WOOD SCULPTURES PAINTED WHITE, EACH 8" ON A SIDE;
131 FRAMED PHOTOS WITH DRAWINGS, EACH 26" × 14"; BASE 1′ × 10′ × 18′

without completing the cube). A similar sort of principle operates, not only in Reich's phase-shifting pieces, but also in works such as his *Music for Eighteen Musicians* (1974–76), in which each of a series of eleven chords given in the relatively brief opening serves in turn as the basis of a section; this "composing out" accounts for almost the entire duration of the piece, excepting only the opening and the conclusion which is its exact duplicate. The wide applicability of this serial principle, in fact, suggests that it is entirely appropriate to continue to apply the term *minimal* to the more recent work of Glass, Riley, and Reich, despite attempts on the part of some critics (and composers) to brand it "Post-Minimal."

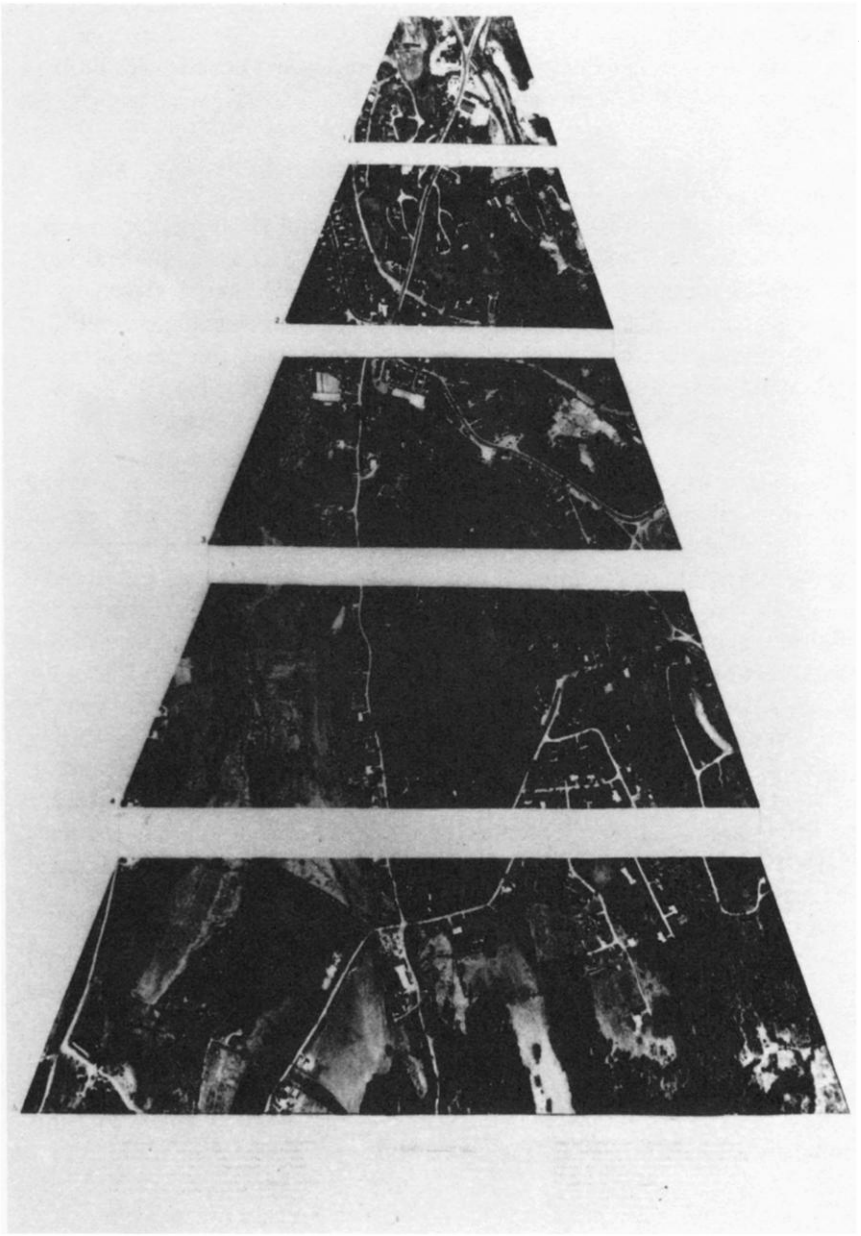
It is for this very quality of temporality, however—instilled at least partly for the sake of rendering the work clearer and more accessible and making of it "something that everyone can understand," in the words of sculptor Tony Smith[58]—that minimal art is perhaps most open to criticism. A difficulty arises from the fact that the basis for the governing decisions noted above is rarely (if ever) justified in any larger terms. In an influential and provocative essay entitled "Art and Objecthood," Michael Fried noted the consequences of this lack: "The *actual* number of modular units in a given piece is felt to be arbitrary, and the piece itself . . . is seen as a fragment of, or cut into, something infinitely larger." Curiously, this impression lends a sense of "endless, or indefinite, *duration*" to the work itself.[59] Environmental artist Robert Smithson has drawn attention to these very qualities in the works he calls "nonsites," which he developed as a way of containing an "oceanic" site and its "disruption." In his words, "The container is in a sense a fragment itself, something that could be called a three-dimensional map. . . . 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."[60] As Example 20 shows, Smithson often incorporated photographs or maps into such works, showing the place from which the material for the nonsite was taken.

Numerous critics in the sixties quickly came to realize that this new art, through its fixation upon literal appearance—Stella's "what you see is what you see"—guaranteed that the work would include the beholder. Not in the sense simply of drawing viewers in, of involving them or fascinating them, but rather in the sense that the act of looking at the work of art would become part of that work's meaning: "An earmark of minimalist art is the tendency to locate content outside the art object, in its physical setting or in viewers' responses, rather than 'inside' it, in the literary or psychological import of an image, for example."[70] This quality amounts in part to a critique of earlier art and its implicit assumption that what is located strictly within the work could wholly define the artistic experience—that a work of



EXAMPLE 20: ROBERT SMITHSON, *A Nonsite, Franklin, N.J.* (1968)
PART 1: WOOD, LIMESTONE. 16½" × 82" × 110"

Photograph courtesy of the John Weber Gallery, New York



EXAMPLE 20 (CONT.): ROBERT SMITHSON, *A Nonsite, Franklin, N.J.* (1968)
PART 2: AERIAL PHOTOGRAPH

art could in fact mean anything without someone around to look at it. But this dependence upon the beholder turned out to be a coin with an opposite side: being included also meant being controlled, coerced. Barbara Rose has noted this quality in Judd's work (Example 21); what he is trying to do, she says,

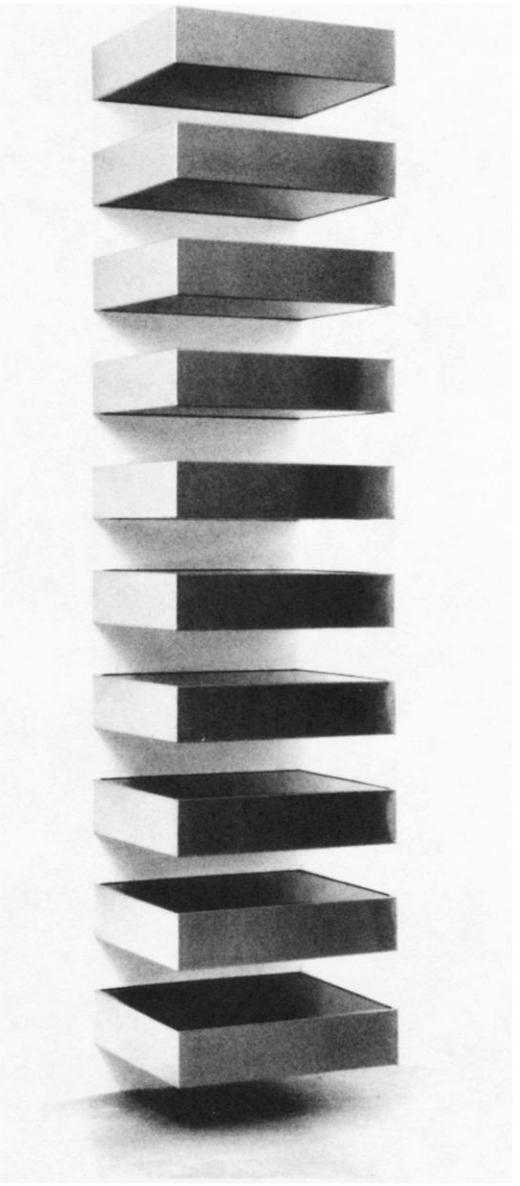
> is to circumvent this process of "reading" or "ordering" required by pictorial conventions in order to force a visual confrontation more direct than that offered by conventional forms. Toward this end he chooses a simple, redundant, nonhierarchical order so that the sharpness and immediacy of the impact of the stamped-out single shape is maximized. There are no choices in looking at a Judd; there is only one way to see it, and hanging it on a wall insures that it will be seen only one way, that is, frontally.[71]

The sheer, vast size of many works of minimal sculpture, besides precluding one from taking them in all at once,[72] may also serve to menace the viewer. Richard Serra's *Circuit*, for example (Example 22), has been described as a work that makes one feel unguarded at every side to stand at its center—in the end, it is "an assault upon our vanity of feeling that we govern the figure we cut in the eyes of the world."[73] In her forceful indictment of this and other aspects of minimal art, Anna Chave notes that the evident desire to dominate the viewer goes hand in hand with the tendency to favor large, even overwhelming scale (especially in sculpture) as a way of seizing control of an area or a space. In some sculptors' work, this aim has been carried to such extremes as to have literally endangered life and property.[74]

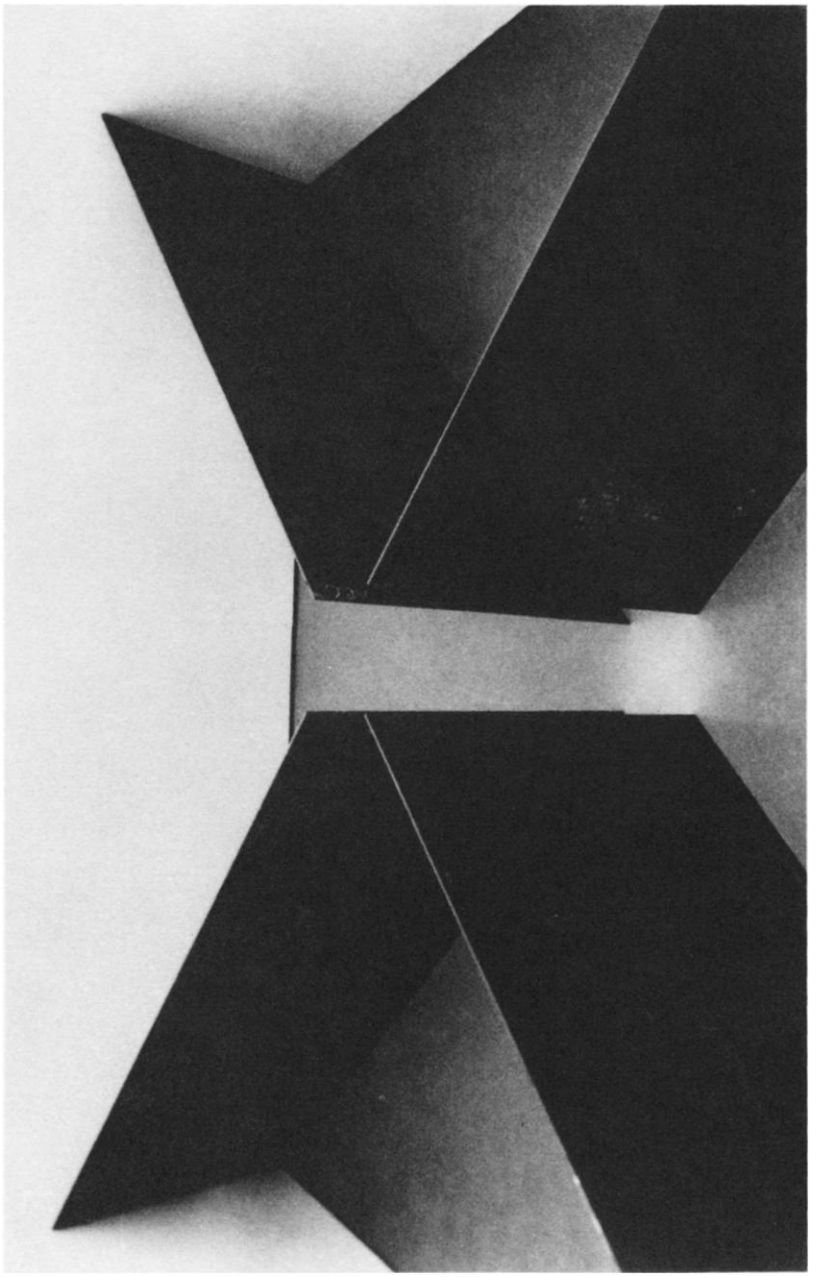
Painters as well have adopted techniques that seem, among other things, calculated to annoy or frustrate the viewer. In particular, Kenneth Noland has produced canvases that are extremely narrow (vertically) but so long (horizontally) that one cannot stand far enough away from them in any normal exhibition space to get them entirely within one's field of vision all at once. The experience of looking at his diamond-shaped canvases has been characterized as "basically unsatisfying and unstable," because "one's eye, in trying to focus on the colors and gauge their relative hues, is always slipping off the edge of the canvas, propelled there by the tilt of the bands."[75] Writing about some of Noland's work from around 1967, this same critic found that either the viewer must give into

> a precipitous and engulfing encounter with sheer, brilliant color, or else one can, by certain eye adjustments, consciously limit the experience of these paintings, that is look at the paintings but in much the same way as one looks at the banal textiles that they resemble. This

Photograph by Bill Jacobson, courtesy of the Pace Gallery



EXAMPLE 21: DONALD JUDD, *Untitled* (1992)
PURPLE PLEXIGLASS AND STAINLESS STEEL
TEN UNITS, EACH $6\frac{1}{8}'' \times 27'' \times 24''$; OVERALL, INSTALLED, $10' \times 27'' \times 24''$





EXAMPLE 22: RICHARD SERRA, *Circuit* (1972). HOT ROLLED STEEL. FOUR PLATES, 8′ × 24′ × 1″ EACH; 8′ × 36′ × 36′ OVERALL

> response, the sense of *having* to choose between accepting or rejecting the painting, is central to the experience of these paintings; . . .[76]

And Stella has been quite candid about the aspect of coercion in his own work:

> One could stand in front of any abstract-expressionist work for a long time, and walk back and forth, and inspect the depths of the pigment and the inflection and all the painterly brushwork for hours. But I wouldn't particularly want to do that and also I wouldn't ask anyone to do that in front of my paintings. To go further, I would like to prohibit them from doing that in front of my painting. That's why I make the paintings the way they are, more or less.[77]

Fried, picking up on Tony Smith's statement that "Something obvious on the face of it (like a washing machine or a pump) is of no further interest," observes that Smith's six-foot steel cube, *Die*, "is *always* of further interest; one never feels that one has come to the end of it; it is inexhaustible." But this apparent fullness really masks a deficiency of content.[61] Analogous criticisms might plausibly be directed towards minimal music as well. Though it is clear enough where such pieces as *I Am Sitting in a Room* or Reich's *Come Out* begin (or at least *start*), it is not at all clear that their endings are controlled by anything other than having run up against the limits of human perception. In a way, maybe they never do end. Lucier's piece, it is worth noting, exists in two widely distributed recorded versions: one on *Source* records lasting just over fifteen minutes; another on Lovely Music lasting about three times that. Is the second version "better" than the first, in the sense that it makes the process of transformation of the original sound source even more gradual? Would a version lasting three days (assuming that a room could be found which would sustain the process of transformation for that long) be better yet? These are hardly absurd questions, because after all the piece has a point, one that as listeners we're supposed to "get"; if we *didn't* get it for some reason, there would be little if anything left for us from which to form an experience of the piece as art. This point, however, is of finite magnitude; if the piece itself is at least theoretically of infinite magnitude, then it would seem that its content is being stretched dangerously thin, even to the point—if taken far enough—of vanishing.

Not all minimal compositions work this way, of course; yet endlessness is a potential problem even with works that do seem to have definite boundaries—for if the governing decisions do not convince in any larger terms, the pieces they define will seem not so much to begin and end as simply to start and stop. Glass's *Two Pages* (1968) certainly gives this

impression with its sudden onset and unprepared conclusion; as Mertens has pointed out, these features give the listener "the feeling that he or she only hears a fragment in a permanent musical continuum"—an image which reminds one of Carl Andre's statement that, instead of cutting into materials, he uses his material itself as "the cut in space."[62] Some minimal music, including much of Glass's, takes the *implication* of endlessness in process pieces even further, doing away with any sense of directedness without, however, denying temporality entirely. Glass has asserted that his music "does not deal with events in a clear directional structure," but as far as time is concerned says only that he has dispensed with the conventional clock variety.[63] This claim should not be taken to imply that one cannot sense the passage of time in Glass's work. And Young's *Dream House* project, though it has no beginning (as far as the composer is concerned) and goes on indefinitely, gives at least some critics a sense of time as "pure duration."[64]

This lack of a sense of direction has been called "nonlinearity" and "vertical time" by Jonathan Kramer in his analysis of *Les Moutons de Panurge*.[65] As he says, quite rightly, this quality "exists only in the work's interior." He is also right to assert that "vertical time . . . does not destroy the temporal continuum"[66]—certainly true of this piece, which is essentially a process piece set up to produce an impression of different rates of change at different points in its course, and also, as mentioned earlier, quite deliberately set up to "go wrong," further hampering any effort the listener may be making to keep track of its progress.[67]

In truth, the relationship of music to visual art in this respect is not a simple one; music is by definition a temporal art, so what could it possibly mean for a work of music to be "at every moment . . . wholly manifest," as Fried says modernist art is, as opposed to literalist (minimalist) art?[68] Yet a distinction between music that *unfolds through* time and music that is *about* time is not at all implausible. Consider, for example, György Ligeti's claim that in his music temporal relations are converted into spatial ones, and that "the succession of events is a mere exposition of something that in its nature is simultaneous."[69] Minimal music, by contrast, more than depends on time as a medium of presentation; it is devoted to making the listener keenly aware of the passage of time. Not clock time as a rule, for the rate of passage of time certainly varies from piece to piece and even, often, within the same piece. But there is something about this sense of the passage of time that is *enforced*—something not found much, if at all, in earlier music—and it is on this level that minimal music owes a particular debt to minimal art.

Such comments, when taken in conjunction with the artworks themselves, bespeak two related aims. One, despite the professed interest on the part of the artists in direct and immediate communication, is actually to

*deny* the viewer access to anything beyond a single, carefully controlled and circumscribed experience of the work. Stella, discussing in 1970 his metallic pinstripe paintings of a decade earlier, recalled his interest in presenting "a real aggressive kind of controlling surface, something that . . . would also be fairly repellent. I liked the idea, thinking about flatness and depth, that these would be very hard paintings to penetrate."[78] The second, more general aim has to do with minimalists' sense of their own historical importance: in dictating to viewers the terms in which their work would be experienced, minimalists were emboldened to form "the terse, but veracious last word in a narrowly framed argument about what modern art is or should be."[79] And their exercise of power over their viewers came to seem, to some critics, not so much a critique as a reflection of the repressive applications of political, social, and economic power in the "real world" of the 1960s.

Similar issues arise on the musical side. "I am wildly interested in repetition," Young said in 1967, "because I think it demonstrates control."[80] And Mertens has (seemingly inadvertently) identified a paradox: that on the one hand the minimal piece cannot be regarded as finished until the listener "actively participates in its construction"; but on the other, that this same listener "is reduced to a passive role, merely submitting to the process."[81] In their elevation to supremacy of the perception of process on the part of the listener, composers such as Reich certainly do imply that there is only one valid way to hear their music. One detects in some of Reich's statements an attempt to deny the existence of this problem:

> Even when all the cards are on the table and everyone hears what is gradually happening in a musical process, there are still enough mysteries to satisfy all. These mysteries are the impersonal, unintended, psycho-acoustic by-products of the intended process. These might include sub-melodies heard within repeated melodic patterns, stereophonic effects due to listener location, slight irregularities in performance, harmonics, difference tones, etc.[82]

Such assurances, however, come across as more than slightly arrogant. "You ought to be satisfied," Reich seems to be saying to the listener, "with the extremely limited options I've given you, and you ought to accept them as the new standard of sufficiently interesting complexity." Would it be more useful to think of Reich's processes as analogous to Morris's gestalts, which cannot account for one's complete experience of a work of art even though they do control it? Most likely not, because there is nothing "unintended" about the eventual divergence of perception from the immediate, initial impression made by Morris's gestalts. The minimalist aesthetic, as noted, really does not permit accidentally produced effects to have any substantial

bearing upon the way a work is perceived. More plausible, actually, is an analogy to the "side effects" that Sol LeWitt identifies as resulting from the process of carrying out "blindly" the idea of the work as established in the artist's mind prior to execution—side effects "that the artist cannot imagine" beforehand and that "may be used as ideas for new works."[83] In fact, Reich himself has acknowledged a resemblance between LeWitt's views and his own in this respect.[84] But to show that the composer or artist is not in absolute control is not to prove that what is not strictly planned or predictable in a work has anything more than incidental significance for the viewer of or listener to *that particular work*. LeWitt, after all, also says: "There are many elements involved in a work of art. The most important are the most obvious."[85]

Glass's dependence on the presence of an audience is just as unambiguous as Reich's, though it is expressed differently. "Art objects," he asserts, "don't exist or function by themselves as abstract entities." Does the tree falling in the forest make any sound if no one is around to hear it? Of course not![86] But juxtapose this opinion with the composer's confession that he has never sat straight through even one performance of his *Einstein on the Beach* without interruption. In his own defense—and presumably in that of anyone else who might not have the requisite stamina—he comments: "The work was never intended to be seen as a whole, narrative piece. Its 'wholeness' comes from its consistency of subject matter and overall structure and becomes the theatrical equivalent of an 'act of faith' for the audience."[87] Here again, the essential paradox of minimalism becomes apparent. When Glass, in an attempt to characterize just what is new about his music, describes it as "no longer . . . referring to something outside itself, but rather embod[ying] itself without any mediation,"[88] he is not invoking the autonomy of "modernist" works from earlier in the century. Compare Glass's statement to one of Marc Wilkinson's about Varèse's pieces: "[They] are like large and imaginative precision instruments, made to be admired for their inherent beauty and their complex, self-sufficient workings."[89] Wilkinson's simile, by the lights of the minimalists, belies his claims of "self-sufficiency": such music cannot be literally and only itself because it evokes other images, however abstractly. And the complexity and mystery alluded to in Wilkinson's description don't help either. But in order for a piece of music to be literally and only itself, listeners must be present who will hear the piece in only one way. If the piece admits of multiple interpretations, if it admits of any ambiguity, the literalism is lost.

By making "perception" the bottom line, minimal music also reduces the demands made upon the listener. This is inevitable, since not everyone is as good at perceiving as everyone else. No longer is the assumption made that one will listen intently, with undivided attention, from the beginning to the end of a work; allowance is made for minds that will wander, or even for

people who will wander right out of the hall in the middle of a performance.[90] Perhaps this constitutes a liberation of sorts, but clearly not everyone thinks so. Mertens, for example, points out that "Since each moment may be the beginning or the end, the listener can choose how long he wants to listen for, but he will never miss anything by not listening."[91]

To say that minimalism has proved to be more than a passing fad is certainly not to say that it is necessarily destined to endure, in the long run, as art. Undoubtedly it is far too early to answer in definitive terms the question of whether minimal music is built to last. In part this is because the history of minimalism is not yet complete—either in art or in music. It *is* true that certain earlier works of minimal painting and sculpture have already taken on a kind of "historical" stature—that they are now regarded as integral to the recent history of art even by those who originally questioned the validity of minimalism. No parallel canonization of even a provisional sort seems to have taken place in music, for even the earliest minimal pieces are still regarded as controversial in many quarters. Perhaps this state of affairs is only a reflection of musicians' more conservative reflexes, compared to their counterparts in any of the other arts; perhaps, that is, eventual general acceptance of this music is only a matter of time. There remains the possibility, however, that some of the problems with minimalism in music discussed earlier will eventually prove insuperable—that, in other words, the adoption of critical language from the plastic arts shows, not that minimal music is "just like" minimal art, but rather that the two media are fundamentally incompatible in certain ways and that the deficiencies of minimal music—if deficiencies they turn out to be—have arisen from pursuing too far the analogy between visual and aural art. Such matters, fortunately, are beyond the scope of this article to resolve.

## Notes

A somewhat shorter version of this paper was delivered at the Thirteenth Annual Meeting of the Society for Music Theory, Oakland, November 1990. I am grateful to Mary Henry, Patrick McCreless, and Pieter van den Toorn for their useful comments on various earlier drafts, and to Christopher Hasty for a stimulating discussion of some of the issues engaged here.

1. Wim Mertens, *American Minimal Music*, trans. J. Hautekiet (London: Kahn & Averill, 1983), 11–12. Even less accommodating are the composers themselves, who, as Jonathan Kramer reports, view the term *minimal* with "apparently universal disapproval" (Jonathan D. Kramer, *The Time of Music* [New York: Schirmer Books, 1988], p. 57).

2. My work on this article was nearly complete when I became aware of an unpublished essay by H. Wiley Hitchcock, "Minimalism in Art and Music: Origins and Aesthetics," currently awaiting publication in the *College Art Journal*. Subsequently, Professor Hitchcock kindly sent me a copy of his manuscript. It is a highly readable piece of work which, though it is fairly brief, does deal seriously with minimalism in the plastic arts and makes some points that are similar to those made here. However, there are some significant, even radical differences between Professor Hitchcock's essay and my own, both in the terms in which these points are conveyed and in the conclusions that are drawn from them.

3. These were sculptors Richard Serra and Bruce Nauman, and filmmaker Michael Snow; the fourth performer was composer James Tenney.

4. See Dan Warburton, "A Working Terminology for Minimal Music," *Intégral* 2 (1988): 135–59 (esp. p. 141). I am unable myself to find any earlier instance.

5. Photos such as the one displayed in Example 3, in their wide dissemination, were probably as responsible as the art itself for spreading what might be called the abstract-expressionist mystique.

6. The ostensibly sparse "event-density" of much of this music, particularly Feldman's, should not mislead one into thinking of it as minimal—for in reality, the small number of events over time tends to focus the listener's attention intensely on each event, in all its particularity, thus resulting, from the minimalist point of view, in a music of parts rather than a whole. (See also discussion below, p. 99, and note 51.)

7. See, for example, I. Michael Danoff, *Emergence and Progression: Six Contemporary American Artists* (Milwaukee: The New Milwaukee Art Center, 1979), 11.

8. Morton Feldman, "Crippled Symmetry," in *Morton Feldman Essays*, ed. Walter Zimmermann (Korpen, Germany: Beginner Press, 1985), 136; Feldman, "Some Elementary Questions," in *Morton Feldman Essays*, 67–70.

9. Feldman, "Crippled Symmetry," 135–36.

10. Leon Shulman, *The Direct Image in American Contemporary Painting* (Worcester, Mass.: Worcester Art Museum, 1969), [13]; Dorothy Seckler, "Frontiers of Space" [interview with Barnett Newman], *Art in America* 50, no. 2 (1962): 87.

11. Barnett Newman quoted in Shulman, *The Direct Image*, [17–19].

12. Ad Reinhardt, statement, in *Art since Mid-Century: The New Internationalism*, vol. 1 (*Abstract Art*), foreword by Jean Leymarie (Greenwich, Conn.: New York Graphic Society, 1971), 292.

13. Reinhardt, "Twelve Rules for a New Academy," quoted in Lawrence Alloway, "Systemic Painting," in *Systemic Painting* (New York: Guggenheim Museum, 1966); reprinted in *Minimal Art: A Critical Anthology*, ed. Gregory Battcock (New York: E.P. Dutton, 1968), 48.

14. Michael Nyman, *Experimental Music: Cage and Beyond* (New York: Schirmer Books, 1972), 119.

15. Reproduced in Nyman, *Experimental Music*, 67, 64.

16. Frank Stella (1966), quoted in William Rubin, "Frank Stella," in *The Great Decade of American Abstraction: Modernist Art 1960–1970*, ed. E. A. Carmean, Jr. (Houston Museum of Fine Arts, 1974), 102.

17. Bruce Glaser, "Questions to Stella and Judd" [interview], *Art News*, September 1966; repr. in Battcock, *Minimal Art*, 156.

18. Peter Gena, "Freedom in Experimental Music: The New York Revolution," *Tri-Quarterly* 52 (1981): 223–43.

19. In fact, the performance of *The Well-Tuned Piano* recorded at 6 Harrison Street in New York on 25 October 1981 is just over five hours in duration (New York: Gramavision Records 18-8701-2 [5 CDs], 1987). Edward Strickland, in a personal communication, reports that a performance of this work in May 1987 lasted six hours, twenty-four minutes.

20. Young, "Notes on *The Well-Tuned Piano*," in booklet accompanying recording of *The Well-Tuned Piano* (New York: Gramavision Records 18-8701-2 [5 CDs], 1987), 9.

21. The score of *Les Moutons de Panurge* has been reprinted in numerous publications, among them *Scores: An Anthology of New Music*, selection and commentary by Roger Johnson (New York: Schirmer Books, 1981), 177. See also note 67 below.

22. See, for example, Glass's comments on serialism in *Music by Philip Glass* (New York: Harper & Row, 1987), 12–13, and the remark: "[Cage, Feldman, and Brown] were men whose work struck me [in the mid-1960s] as far less doctrinaire and much more adventurous than that of their European contemporaries" (13).

23. Michael Nyman, in "Against Intellectual Complexity in Music" (*October* 13 [1980]: 81–89), makes this point from a different angle, commenting that "Cage's attitude towards unfixing relationships was—and unfortunately remains—as rigorous and strict as the serialist's towards fixing relationships" (86), leaving the implication that it was the adherents of the "New Simplicity," as Nyman chooses to call the minimalists in this article, who really solved the problem of compositional freedom.

24. Kenneth Noland, "The Thing in Painting Is Color," *New York Times*, 25 August 1968; quoted in *Art since Mid-Century* vol. 1, 293.

25. Glaser, "Questions to Stella and Judd," 157.

26. E. A. Carmean, Jr., "Modernist Art 1960 to 1970," in *The Great Decade of American Abstraction*, 31. That there was something in the minimalist sensibility that denied the solidity of *anything* is plainly evident in a remark by the environmental artist Robert Smithson: "One might object to 'hollow' volumes in favor of 'solid materials,' but no materials are solid, they all contain caverns and fissures. Solids are particles built up around a flux, they are objective illusions supporting grit, a collection of surfaces ready to be cracked" (Smithson, "A Sedimentation of the Mind: Earth Projects," in *Flyktpunkter/Vanishing Points* [Stockholm: Moderna Museet, 1984], 172).

27. Michael Benedikt, "Sculpture as Architecture: New York Letter, 1966–67," *Art International* 10, no. 7; 10, no. 10; 11, no. 1; 11, no. 2; 11, no. 4; reprinted in Battcock, *Minimal Art*, 88.

28. Robert Morris, Statement, in *Art since Mid-Century* vol. 1, 293.

29. Hitchcock, in "Minimalism in Art and Music," discusses this parallel. The assertion of surface, however, may have another purpose as well. See below.

30. Robert Morris, Statement, in *Art since Mid-Century* vol. 1, 293.

31. Glaser, "Questions to Stella and Judd," 151, 154. The allusion to painting in this statement not only reveals that it was abstract expressionism to which Judd was primarily reacting, but also confirms that it was a dissatisfaction with painting in general that turned Judd to sculpture in the first place.

32. David Bourdon, "The Razed Sites of Carl Andre," *Artforum*, October 1966; reprinted in Battcock, *Minimal Art*, 104.

33. Mel Bochner, "Serial Art, Systems, Solipsism," *Arts Magazine*, Summer 1967; reprinted in Battcock, *Minimal Art*, 94.

34. Robert Morris, "Notes on Sculpture," *Artforum*, February and October 1966; reprinted in Battcock, *Minimal Art*, 225–26.

35. Ibid., 225–26, 228.

36. I use the word "improvised" here only to signify that, while the sounds supplied by Tudor were not in themselves invented on the spur of the moment (the electronic material was prerecorded, the piano material written out in full), their occurrence in relation to Cage's spoken texts was not planned ahead of time. In fact, this would have been impossible to do, since Cage and Tudor recorded this piece in real time while occupying different rooms, out of earshot of each other.

37. For Lucier's score, which is simply a set of verbal directions, see *Scores: An Anthology*, 199, or Alvin Lucier and Douglas Simon, *Chambers* (Middletown, Conn.: Wesleyan University Press, 1980), 30–31.

38. Philip Glass, *Music by Philip Glass*, 17.

39. Excerpt from score supplied in Mertens, 71.

40. This phrase is actually taken from Glass's commentary on his *Music in Twelve Parts*, though it could just as well apply here. (Quoted in Mertens, 79.)

41. Dore Ashton speaks of Martin as "a meditative painter" in her essay "Agnes Martin and . . ." in *Agnes Martin Paintings and Drawings 1957–1975* (Arts Council of Great Britain, 1977), 7–14; Baer's work of the sixties is termed "contemplative" by David Elliott in his "Introduction" to *Jo Baer: Paintings 1962–1974* (Oxford: Museum of Modern Art, 1977), 3–11.

42. Martin, "We Are in the Midst of Reality Responding to Joy" (lecture, Yale University, 5 April 1976), in *Agnes Martin*, 17–39.

43. Such is evidently the view of Elaine Broad, for example, who in her article, "A New X? An Examination of the Aesthetic Foundations of Early Minimalism" (*Music Research Forum* 5 [1990]: 51–62), refers to minimal music as "non-time-directed" (59). In this regard, she echoes Mertens, who speaks of the "mere duration and stasis" of Young's work (*American Minimal Music*, 89). Nyman, too, comes perilously close to equating the formal stasis attributed by Cage in 1948 to new music (including his own) with the qualities of Young's music ("Against Intellectual Complexity in Music," 88–89).

44. Hitchcock, "Minimal Art and Music"; John Rahn, "What Is Valuable in Art, and Can Music Still Achieve It?," *Perspectives of New Music* 27, no. 2 (Summer 1989): 6–17.

45. Glaser, "Questions to Stella and Judd," 158.

46. Quoted in Rubin, "Frank Stella," 108.

47. Barbara Rose, "A B C Art," *Art in America*, October-November 1965; reprinted in Battcock, *Minimal Art*, 291.

48. Judd, "Specific Objects," *Arts Yearbook* 8 (1965); reprinted in Judd, *Complete Writings 1959–1975* (Halifax: Nova Scotia College of Art and Design; New York: New York University Press, 1975), 181–89.

49. Steve Reich, "Music as a Gradual Process" (1968), in *Writings about Music* (Halifax: Nova Scotia College of Art and Design; New York: New York University Press, 1974), 9.

50. Ibid., 10. He refers, in all likelihood, to the methods used for *Changes*, *Imaginary Landscape No. 4*, and *Music for Piano 21–52*, all documented in John Cage, *Silence* (Middletown, Conn.: Wesleyan University Press, 1973), 57–61.

51. Feldman, "Crippled Symmetry," 137; "Some Elementary Questions," 67–70. Discussing his *Triadic Memories*, Feldman notes that each of the chords in slow tempo is repeated a number of times depending on "how long I felt it should go on," and reports finding that "Quite soon into a new chord I would forget the reiterated chord before it." Working with this phenomenon, he aimed for a "disorientation of memory," under which the repetition without discernible pattern would *suggest* "that what we hear is functional and directional, but we soon realize that this is an illusion" ("Crippled Symmetry," 127). The idea of an eternal present could not be more clearly projected than it is here.

52. Morris, "Notes on Sculpture," 234.

53. Maurice Berger, *Labyrinths: Robert Morris, Minimalism, and the 1960s* (New York: Harper & Row, 1989), 53.

54. Barbara Haskell, *Jo Baer* (New York: Whitney Museum of Modern Art, 1975), [6]. Baer, it seems, undertook these wraparound works in part as a response to Judd's and others' increasingly harsh criticism of the medium of painting itself towards the end of the sixties.

55. Reported in Bochner, "Serial Art, Systems, Solipsism," 99.

56. Lawrence Alloway, "Agnes Martin," in *Agnes Martin* (Philadelphia: Institute of Contemporary Art, University of Pennsylvania, 1973), 9–12.

57. Nyman, "Against Intellectual Complexity in Music," 84.

58. Tony Smith, quoted in Michael Fried, "Art and Objecthood," *Artforum*, June 1967; reprinted in Battcock, *Minimal Art*, 134.

59. Fried, "Art and Objecthood," 144n, 144.

60. Smithson, "A Sedimentation of the Mind," 176–77.

61. Fried, "Art and Objecthood," 143–44.

62. Mertens, 71; Andre quoted in Bourdon, "The Razed Sites of Carl Andre," 104.

63. Glass, quoted in Mertens, 88.

64. Mertens, 91.

65. Kramer, *The Time of Music*, 388–94.

66. Ibid., 376.

67. Dan Warburton, however, claims that Rzewski now prefers performers to play *Les Moutons* with the score completely written out, in order to prevent the previously inevitable dissolution of the unison/octave presentation (see "A Working Terminology for Minimal Music," 146). This information, if true, would seem to indicate that Rzewski is now interested in exerting greater control than formerly over the sounding result—reflecting a tendency not at all foreign to minimalism—although many of Kramer's observations about the piece would still hold true under this interpretation.

68. Fried, "Art and Objecthood," 145.

69. György Ligeti, "Metamorphoses of Musical Form," in *Die Reihe* 7 (Form–Space), English ed. (Bryn Mawr, Pa.: Presser, 1965), 15.

70. Kenneth Baker, *Minimalism: Art of Circumstance* (New York: Abbeville Press, 1988), 21.

71. Barbara Rose, *A New Aesthetic* (Washington, D.C.: Washington Gallery of Modern Art, 1967), 12–13.

72. Lucy R. Lippard notes this quality in many of Tony Smith's sculptures (*Tony Smith* [New York: Harry N. Abrams, 1972], 19).

73. Baker, *Minimalism*, 121.

74. Anna C. Chave, "Minimalism and the Rhetoric of Power," *The Arts Magazine* 64, no. 5 (January 1990): 44–63.

75. Jane Harrison Cone, "Kenneth Noland's New Paintings," in *The Great Decade of American Abstraction*, 75.

76. Ibid., 74.

77. Glaser, "Questions to Stella and Judd," 159.

78. Stella, quoted in Chave, "Minimalism and the Rhetoric of Power," 50–51.

79. Chave, 45.

80. Young quoted in Dave Smith, "Following a Straight Line: La Monte Young," *Contact* 18 (1977–78): 4–9.

81. Mertens, 90.

82. Reich, "Music as a Gradual Process," 10–11.

83. Sol LeWitt, "Sentences on Conceptual Art," in *Sol LeWitt*, ed. and introd. Alicia Legg (New York: Museum of Modern Art, 1978), 168.

84. Emily Wasserman, "An Interview with Composer Steve Reich," *Artforum* 10, no. 9 (1972): 44–48.

85. LeWitt, "Sentences on Conceptual Art," 168.

86. Glass, *Music by Philip Glass*, 36–37.

87. Ibid., 57.

88. Glass, quoted in Mertens, 88.

89. Marc Wilkinson, "An Introduction to the Music of Edgar Varèse," *The Score and I.M.A. Magazine* 19 (1957): 5.

90. Robert Carl, in "The Politics of Definition in New Music" (*College Music Symposium* 29 [1989]: 101–14), makes this same point (111).

91. Mertens, 90.