



OPTIC NERVE
PERCEPTUAL ART OF THE 1960s

JOE HOUSTON
INTRODUCTION BY DAVE HICKEY

THE FOUNDATIONS OF OP

In the search for a pure language of form, distinct from representations of the natural world, disparate movements of geometric abstraction emerged after World War I. In 1917, the Dutch group De Stijl was formed by Piet Mondrian and Theo van Doesburg, who espoused a minimal vocabulary of rectilinear elements for an "art of pure relations," or what Van Doesburg termed "elementarism." Through their abstract compositions and self-published magazine, they reflected the theosophist search for a divine absolute, paralleled in the Suprematist philosophy of Kasimir Malevich in Russia. The avant-garde ideologies of Dutch Neo-Plasticism and Russian Constructivism were diffused throughout Europe during the 1920s and 1930s by various artists. Mondrian and Van Doesburg relocated to France, eventually following separate paths in their quest for a pure abstract language. Malevich traveled to Poland and Germany, where his exhibitions garnered devoted followings. His compatriot Naum Gabo emigrated to England, where he introduced constructivist ideals to an emerging generation of abstractionists. And the Russian-born El Lissitzky took up residence in Germany to become the Russian cultural ambassador to the Weimar Republic.

An important point of connection for the various branches of the new abstract aesthetic was established in Weimar Germany in 1919 when Walter Gropius formed the Bauhaus school for fine and applied art. The Bauhaus's innovative program integrated art, architecture, and numerous design practices into a progressive curriculum guided by

fundamental principles of the basic elements of color and design. Kandinsky, returning to Germany after five years in Russia, joined Paul Klee and Johannes Itten on the faculty, and together they formulated a foundation course in color theory and practice that merged the scientific and metaphysical perspectives of color. László Moholy-Nagy, Max Bill, and Josef Albers (a former student at the school) also taught the preliminary course, which exerted a lasting impact on art and education worldwide. When the Nazi Party officially closed the Bauhaus in 1933, its faculty dispersed throughout Europe and America. Max Bill returned to Switzerland, where he would later found the Hochschule für Gestaltung in Ulm, based on Bauhaus principles. Gropius and Moholy-Nagy moved to England with the hope of starting a new Bauhaus there, but those plans remained unfulfilled and they eventually immigrated to the United States. Gropius took a position at Harvard Graduate School of Design and Moholy-Nagy moved to Chicago, where he



Above: Fig. 39

Paul Klee
German, 1879–1940

Lonely Flower, 1934

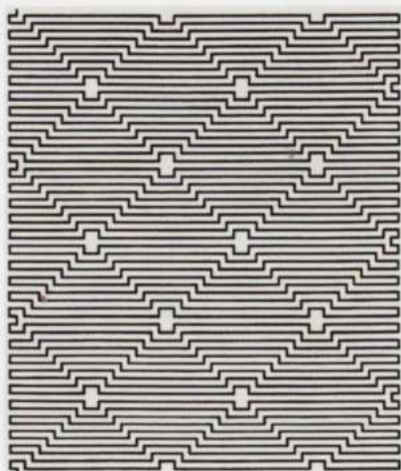
Watercolor with pen and black ink on tan paper, laid down
18⁷/₈ x 12³/₈ in. (47.9 x 31.4 cm)
Columbus Museum of Art, Columbus, Ohio:
Gift of Howard D. and Babette L. Sirak,
the Donors to the Campaign for Enduring
Excellence, and the Derby Fund.
1991.001.025

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Bild-Kunst, Bonn

Left: Fig. 40

Photograph by UMBO (Otto Umbehr) of
Josef Albers teaching at the Bauhaus,
Dessau, Germany, 1928

Courtesy of The Josef and Anni Albers Foundation,
Bethany, Connecticut and Phyllis Umbehr/Gallery
Kicken, Berlin, Germany © 2006 Artists Rights Society
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Above, left: Fig. 41

Waclaw Szpakowski

Polish, 1883–1973

B: B5

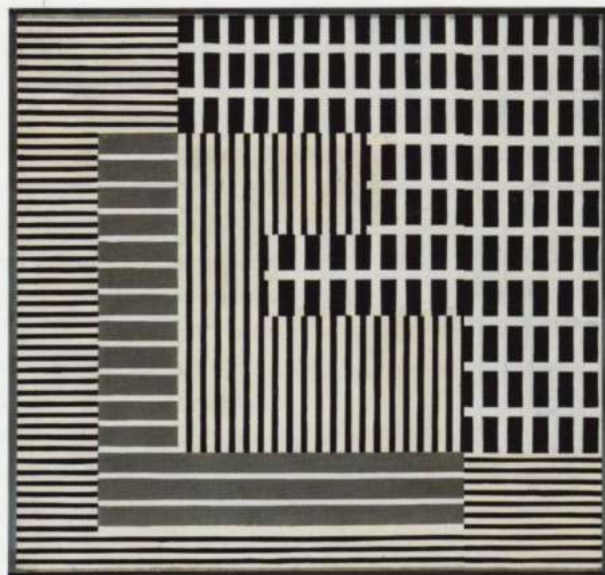
1924

Ink on paper

11³/₄ x 10³/₁₆ in. (29.8 x 25.8 cm)

Collection of Getulio Alviani, Milan, Italy

(Detail on p. 38)



Above, center: Fig. 42

Henryk Stazewski

Polish, 1894–1988

Composition

(Kompozycja Fakturowa)

1930–31

Oil on canvas

27¹/₂ x 31¹/₂ in. (70 x 80 cm)

Museum Sztuki, Łódź, Poland

Photography by Piotr Tomczyk



Above, right: Fig. 43

Georges Vantongerloo

Belgian, 1886–1965

Construction of Volumetric Interrelationships Derived from the Inscribed Square and the Square Circumscribed by a Circle

1924

Cement cast, painted white

11¹³/₁₆ x 10 in. (30 x 25.5 cm)

The Solomon R. Guggenheim Foundation, New York, New York; Peggy Guggenheim Collection, Venice, Italy 1976.76.2553 59

Photography by David Heald © SRGF, New York

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founded the Institute of Design modeled after the Bauhaus. Josef Albers moved to North Carolina at invitation of Philip Johnson to teach at the new Black Mountain College, where he remained until joining faculty at Yale University in 1950. Albers influenced a generation of artists at Black Mountain and Yale with his rigorous color theories, which he eventually published in *The Interaction of Color* in 1963.¹

With the international diffusion of artists and intellectuals during the 1930s and 1940s, the Constructivist aesthetic was seeded in urban centers throughout Europe and the Americas. The basic principles of color and design inherited from the Bauhaus became rooted in the foundation programs of universities and art schools by the end of World War II. In New York in particular, this influx of new ideas also incited a generation of Abstract Expressionists, whose origins lay in European Surrealism. Solidified as a movement in 1951, when the diverse group organized to protest the conservatism of the Metropolitan Museum of Art, their emotive art struck a chord in the collective conscience of postwar America. The movement also came to stand for progressive and democratic ideals and, with the support of Nelson Rockefeller and the Museum of Modern Art in New York, was exported as cultural capital in international exhibitions during the Cold War years. The Abstract Expressionist method of "automatic," or "action," painting gained its counterpart in the European tendency of "Art informel" or "Tachisme" (a refer-

ence to Félix Fénéon's characterization of the random Impressionist "blot" in contrast to neo-Impressionist precision). But by the late 1950s, a younger generation of artists was emerging internationally in a climate of a new and progressive ideology, bolstered by science and industry.

The Constructivist tendency lay dormant in America and Britain through much of the 1950s, but maintained its foothold in continental Europe during and after the war. Countering the rising tendencies in Surrealist and representational art, a number of the formalists convened a loose alliance of the Abstraction-Création group, publishing an eponymous journal throughout the 1930s. Among those included in the group were former De Stijl members Mondrian and Georges Vantongerloo, Russian expatriates Kandinsky and Gabo, and Polish artists Władysław Strzemiński and Henryk Stazewski, previously of the Suprematist-inspired Blok group. After the war many of them exhibited under the banner of "Art Concret" in France and, later, "Konkrete Kunst" in Switzerland, and "Movimento Arte Concreta" in Italy. Coined by Van Doesburg years earlier, the term "concrete" gained favor over the historically entrenched "constructivist" heading, to characterize art devoid of symbolic or representational function. Concrete art formed the backbone of a major exhibition, the *Salon des Réalités Nouvelles*, at the Musée d'Art Moderne in Paris in 1946, with annual versions occurring throughout France in ensuing years. Among the artists included

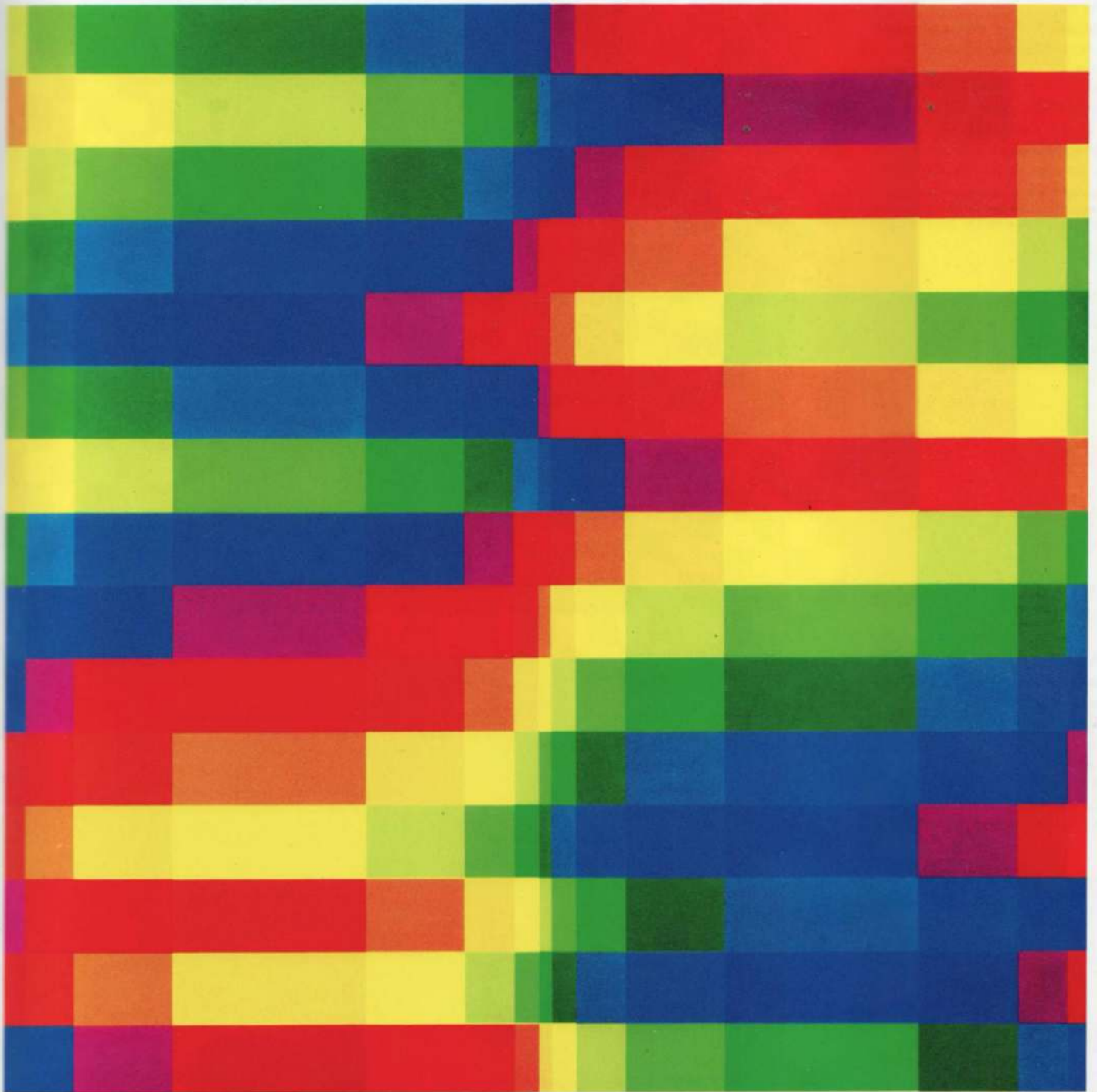


Fig. 44

Richard Paul Lohse

Swiss, 1902–1988

**Fifteen Systematic Color Rows with
Vertical Condensations, 1950–68**

Oil on canvas

59¹/₈ x 59¹/₈ in. (150.2 x 150.2 cm)

The Museum of Modern Art, New York, New York:

The Riklis Collection of McCrory Corporation.

1040.1983

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Society (ARS), New York/ProLitteris, Zürich

Right: Fig. 45

Josef Albers

American, born Germany, 1888–1976

Goldrosa

c. 1926

Sand-blasted flashed glass with black paint

17³/₄ x 12³/₄ in. (45.1 x 32.4 cm)

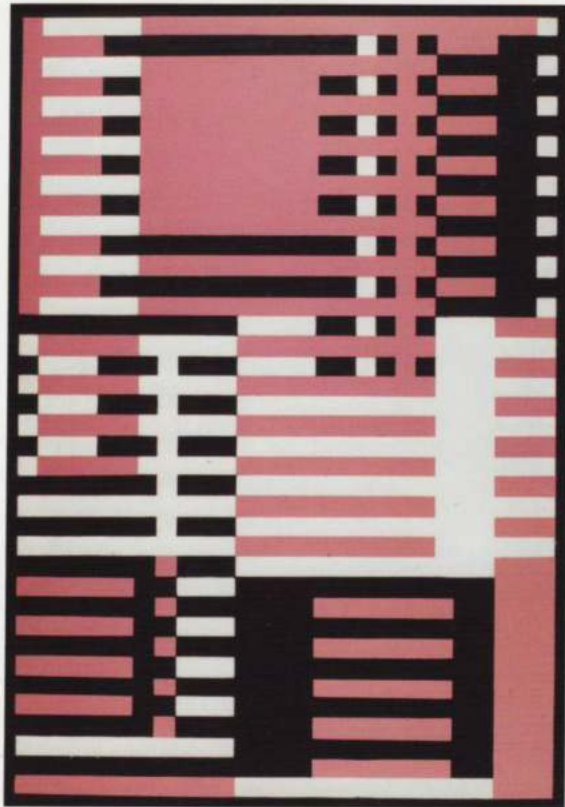
The Josef and Anni Albers Foundation,

Bethany, Connecticut. JAAF#1976.6.1

Photography by Tim Nighwander © 2006 The Josef

and Anni Albers Foundation/Artists Rights Society

(ARS), New York



Right: Fig. 46

Karl Benjamin

American, born 1925

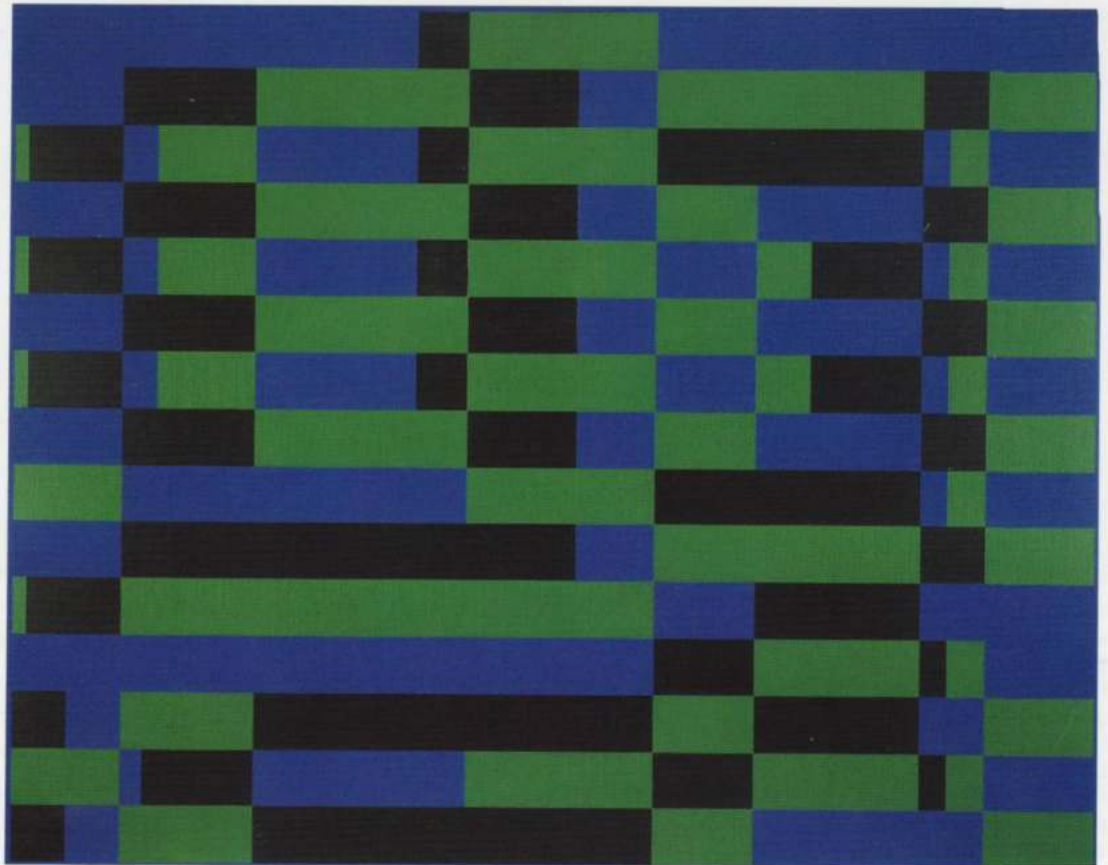
Bars: Black, Blue, Green

1959

Oil on canvas

40 x 50 in. (101.6 x 127 cm)

Courtesy of Louis Stern Fine Arts, West Hollywood,
California. © Karl Benjamin, reproduced by permission



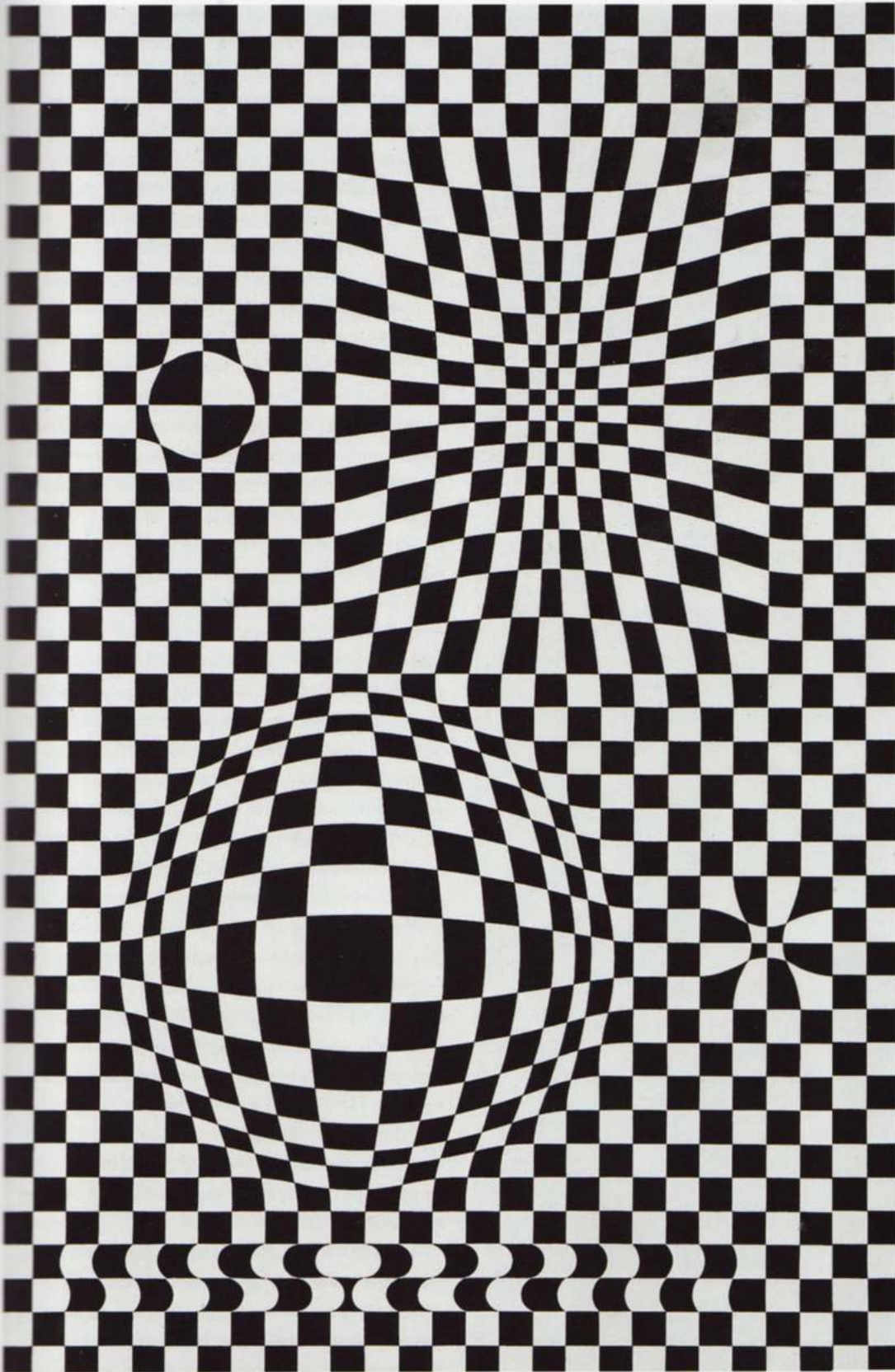


Fig. 47

Victor Vasarely

French, born Hungary, 1906–1997

Vega

1957

Acrylic on canvas

100 x 73 in. (254 x 185.4 cm)

Collection of Charles Simonyi, Seattle,
Washington

Courtesy of Michèle Vasarely, Photograph © 1999
Eduardo Calderón © 2006 Artists Rights Society
(ARS), New York/ADAGP, Paris



Above: Fig. 48
 Photograph of Groupe de Recherche d'Art Visuel (GRAV): left to right, Julio Le Parc, Joel Stein, Horacio Garcia-Rossi, François Morellet, Jean-Pierre Yvaral, and Francesco Sobrino at the Exposition Museum Am Ostwall, Dortmund, Germany 1968

Courtesy of François Morellet

Right: Fig. 49
 Photograph of Anonima Group: left to right, Francis Hewitt, Ed Mieczkowski, and Ernst Benkert c. 1965

Courtesy of Ernst Benkert



was Hungarian-born Victor Vasarely, who had studied at the "Budapest Bauhaus" before settling in Paris in 1930.² At the end of World War II Vasarely co-founded a gallery in Paris with the dealer Denise René, which became an important showcase for artists in the constructivist, or concrete, tradition. Galerie Denise René presented such pioneering shows as *Le Mouvement* (1955; see fig. 53), which featured "kinetic art" by esteemed artists including Marcel Duchamp and Alexander Calder, along with such younger artists as Vasarely, the Israeli Yaacov Agam, and the Venezuelan Jesús Rafaël Soto.

Vasarely's career flourished during the 1950s. A prolific painter and sculptor, he exhibited throughout Europe and the Americas, exerting international influence with his bold progressive abstraction. Contrary to the prevailing "informal abstraction," his paintings and constructions combined the elemental forms of constructivism with the systematic logic of science, reflecting his diverse interests, from astronomy to wave mechanics. Vasarely's faith in technology is exemplified by a bold use of geometric forms, rigorous compositional structures, and the inventive application of industrial materials and mass-production techniques. His colleague Soto shared these interests, likewise experimenting with precise formal structures and layered graphic patterns to yield dynamic optical effects. Soto left Venezuela for Paris in 1950, one of the first of many Latin American artists to be attracted to the French capital after the war.

During an era of democratic social reform and expanding international commerce, Argentina and Brazil also became important points of contact for the new abstraction, following the inauguration of several museums for modern art. Vasarely exhibited there as early as 1949 and Max Bill, having just opened his design academy in Ulm, was awarded the sculpture prize at the first São Paulo Biennale in 1951. On a subsequent speaking tour of Latin America, Bill expounded his theories of structural and mathematical order. These he later summarized: "Art can originate only when and because individual expression and personal invention subsume themselves under the principle of order of the structure and derive from it a new lawfulness and new formal possibilities."³ The progressive aesthetic ideology of the new concrete painting and kinetic sculpture, and its concomitant values of technological and egalitarian progress, resonated strongly in regions in economic and social transition. In Latin America artists took up the mantle of concrete art, forming such groups as *Arte Concreto-Invencion*, *Madi*, and *Grupo Ruptura*, intent on defining a new art that broke with the traditions and failings of the past.

In Europe, a generation was rebelling against what they viewed as the self-absorption and elitism of Abstract Expressionist sensibility. A number of artists' groups formed internationally, their members sharing a common distaste for bourgeois art and its institutions,

professing socialist politics, and sometimes working anonymously within the collective. Among the first groups to emerge in 1957 were the transnational Zero Group, founded in Düsseldorf with Heinz Mack and Yves Klein, and Equipo 57, formed in Paris by a group of Spanish expatriates including Angel Duarte and Juan Serrano. The Italian collectives of Gruppo N, with Toni Costa and Edoardo N. Landi, and Gruppo T, with Gianni Colombo and Gabriele de Vecchi, formed in Padua and Milan respectively. The following year, the Groupe de Recherche d'Art Visuel (GRAV) was founded in Paris, with Julio Le Parc, François Morellet, and Jean-Pierre Yvaral among its members. Also in 1960, Ernst Benkert, Francis Hewitt, and Ed Mieczkowski organized the sole American collective, Anonima Group, in Ohio. In addition, NUL in Amsterdam and Effekt Group in Munich emerged at this time.⁴ Many of the collectives issued provocative and dogmatic manifestos positioning themselves in opposition to the official power structures in art and society with language reminiscent of the Futurist manifestos of half a century earlier. While the phenomenon of the collectives is a significant part of the developing neo-Constructivist aesthetic, there were many influential artists who independently shared this perspective, including the Venezuelans Carlos Cruz-Diez and Soto, the Germans Ludwig Wilding and Wolfgang Ludwig, the Italian sculptor and designer Getulio Alviani, and the Swiss electronic artist Karl Gerstner. By 1961, a critical mass of artists working in a Constructivist vocabulary and focused on creating an alternative, viewer-centered experience appropriate to a progressive and egalitarian era had emerged.

The concrete aesthetic was less pronounced in postwar art in the United States, although the New York association American Abstract Artists (AAA) counted many of its adherents among its ranks, including Piet Mondrian, who had relocated to New York in 1940, and Josef Albers. Albers's course in color at Yale University, based on the Bauhaus program he had helped devise, attracted such students as Richard Anuszkiewicz and Julian Stanczak. They formed part of a core group of students for whom the investigation of color came to be of primary interest, an unexplored avenue leading to pure perceptual abstraction. Their study was given impetus by principles of perceptual psychology then gaining



Left: Fig. 50
Bob Goodnough
American, twentieth century
Bomb II
 1965
 Oil, acrylic, and charcoal on canvas
 80 x 104 in. (203.2 x 264.2 cm)
 Columbus Museum of Art, Columbus, Ohio:
 Museum purchase with funds provided by
 Neil K. Rector. 2006.010



Left: Fig. 51
Jesús Rafaël Soto
Venezuelan, 1923–2005
Transformable Harmony
(Harmonie Transformable)
 1956
 Plexiglas, wood, lacquer, and metal
 39³/₈ x 15³/₄ x 39³/₈ in.
 (100 x 40 x 100 cm)
 Fundación Museo de Arte Moderno Jesús
 Soto, Ciudad Bolívar, Venezuela
 © 2006 Artists Rights Society (ARS), New
 York/ADAGP, Paris



Left: Fig. 52
Equipo 57
Spanish, active 1957–1961
Untitled
 c. 1959
 Oil on board
 29¹/₂ x 29¹/₂ in. (75 x 75 cm)
 Courtesy of Galerie Denise René, Paris, France

Right: Fig. 53
Installation view of *Le Mouvement II*,
Galerie Denise René, Paris
1964–65

Courtesy of Galerie Denise René, Paris, France



Right: Fig. 54

Carlos Cruz-Diez

Venezuelan, born 1923

**Chromosaturation for a Public
Place**

1969

Wood, colored Plexiglas, and electric lights
Eighteen chambers, each 47 $\frac{1}{4}$ x 47 $\frac{1}{4}$ in.
(120 x 120 cm)

Installation at the "Art in the Street" festival,
organized by the National Centre of
Contemporary Art at the exit of Odeon
metro station, Boulevard Saint Germain,
Paris

Courtesy of Atelier Cruz-Diez and Sicardi Gallery,
Houston, Texas © 2006 Artists Rights Society (ARS),
New York/ADAGP, Paris



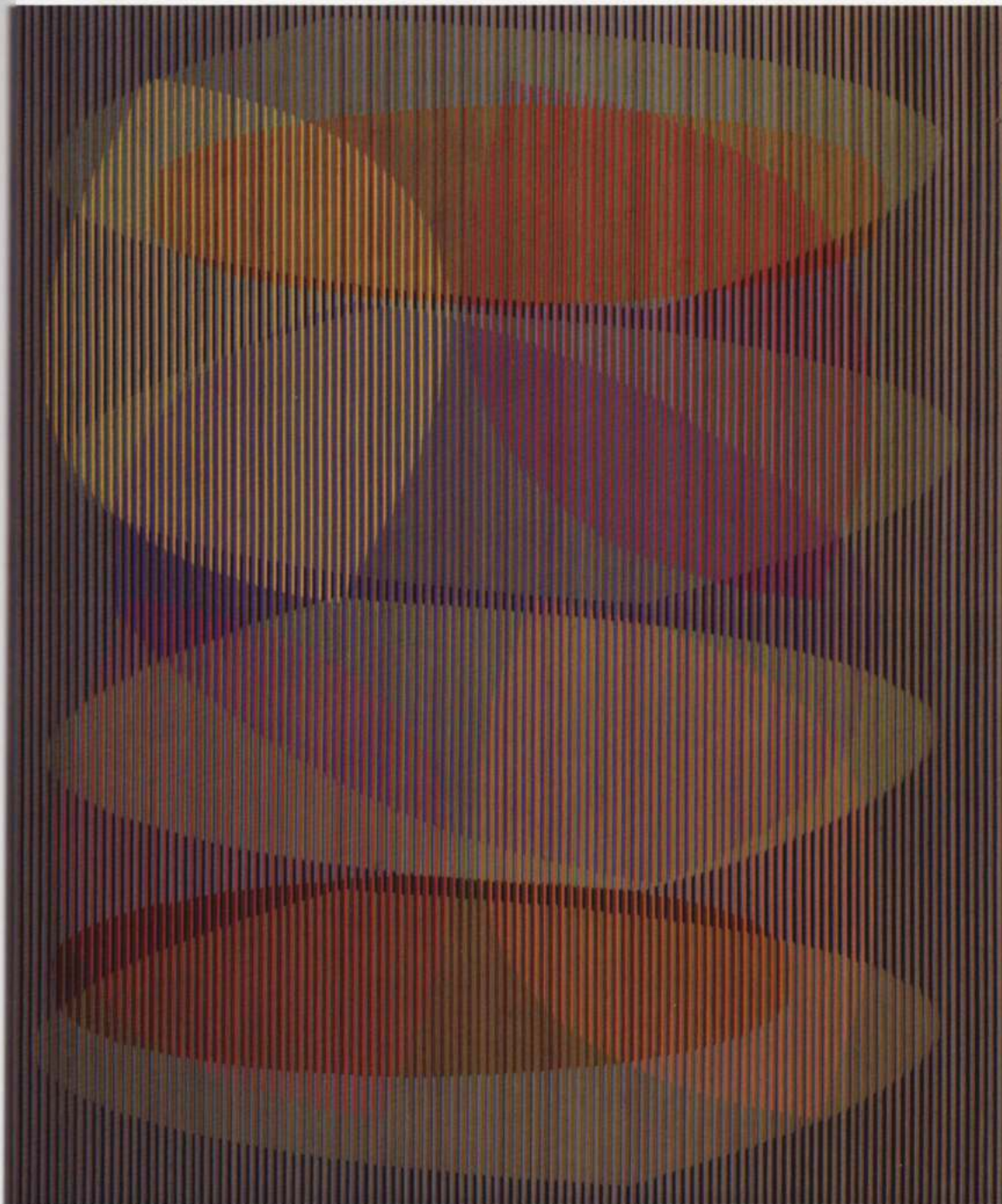


Fig. 55

Carlos Cruz-Diez

Venezuelan, born 1923

Physichromie 174

1965

Aluminum, plastic, and
cardboard

23⁵/₉ x 20 x 1³/₄ in.

(59.7 x 50.8 x 4.5 cm)

Private collection

Courtesy of Sicardi Gallery,
Houston, Texas © 2006 Artists
Rights Society (ARS), New
York/ADAGP, Paris

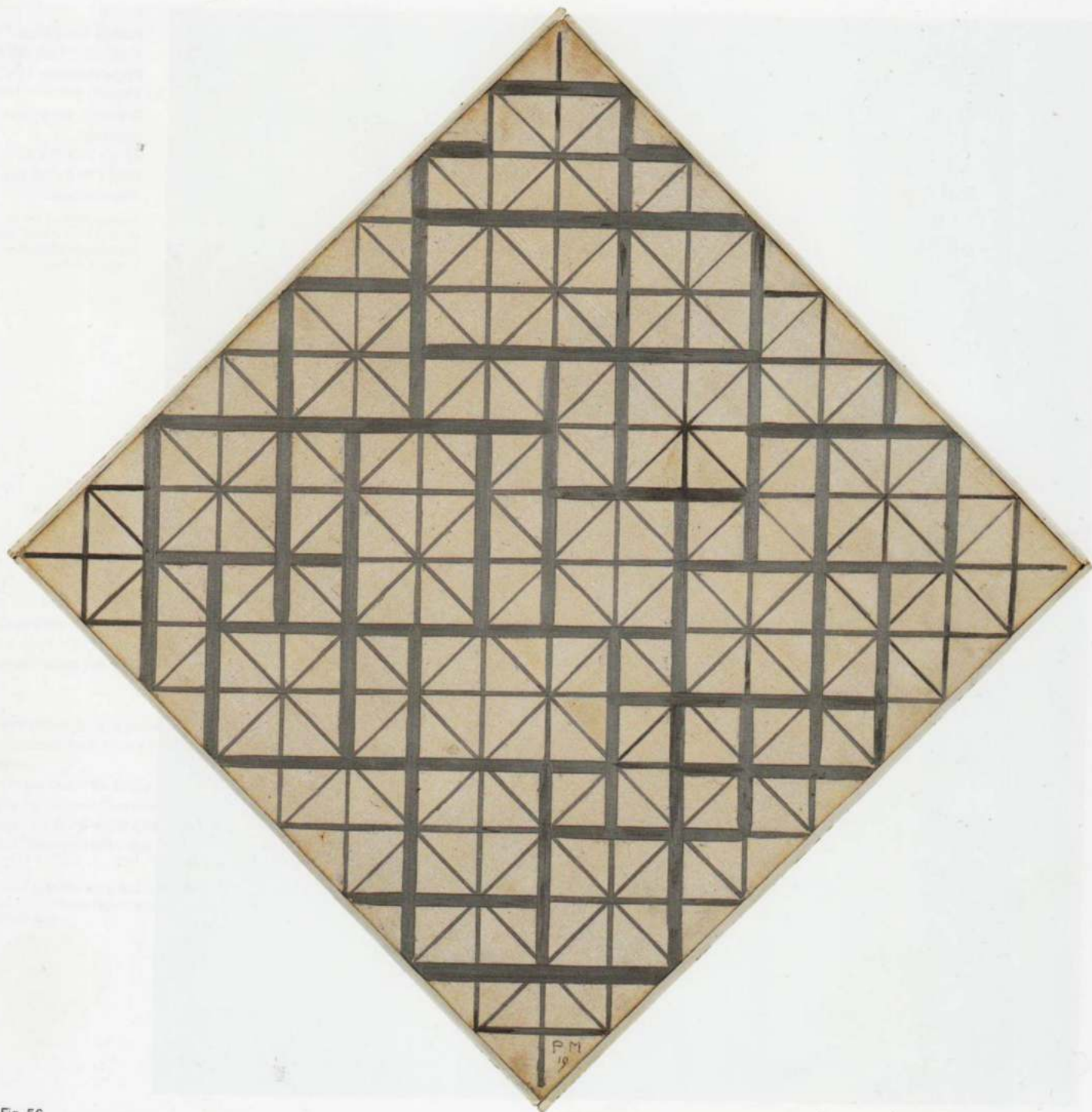


Fig. 56

Piet Mondrian

Dutch, 1872–1944

**Composition with Grid 4: Lozenge
Composition, 1919**

1919

Oil on canvas

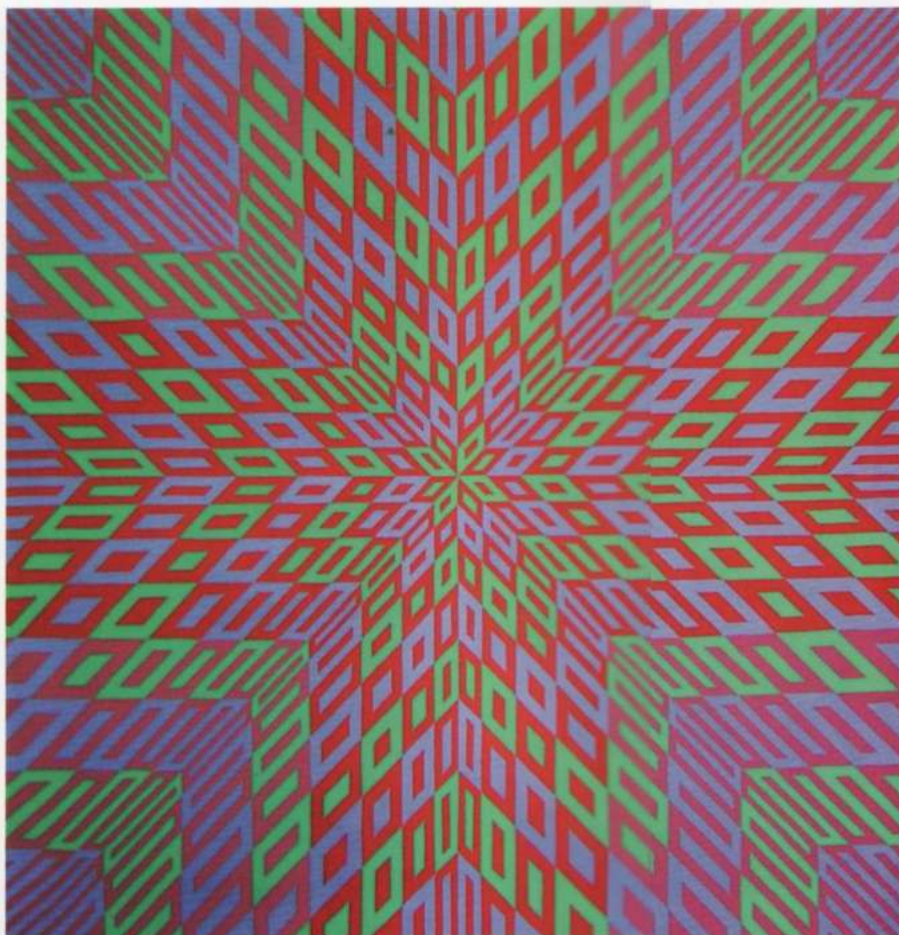
23³/₈ x 23⁵/₈ in. (60 x 60 cm) (sides)

Philadelphia Museum of Art, Philadelphia,
Pennsylvania

© 2007 Mondrian/Holtzman Trust c/o HCR International,
Warrenton, VA

currency in academia. Rudolf Arnheim, a Gestalt theorist who had contact with the Bauhaus before immigrating to the United States, published *Art and Perception: A Psychology of the Creative Eye* in 1954, which exerted a profound influence. Stanczak spent months translating it from English into his native Polish. In 1958, shortly after Anuszkiewicz and Stanczak graduated, Albers retired from teaching to devote himself to his art and his writings on color.

By 1960, Abstract Expressionism was on the wane and a new mode of abstraction that exploited principles of perception was in its ascendancy, gaining notice initially under the terms "Hard-Edged," "Post-Painterly Abstraction," "Geometric Abstractionists," and "Neo-Formalists." In the early 1960s, the work of Abstract Expressionists, including Ad Reinhardt and Bob Goodnough (fig. 50), embodies a shift within the group to encompass both the expressive and the geometric. In Latin America, Britain, and Canada, as well, the tendency was surfacing with a new generation of artists. In continental Europe, however, the new concrete art was reaching a critical mass, as a result of the presence of Vasarely and Soto, who supported many facets of the emerging abstraction, along with the Galerie Denise René. The first major exhibition to corral a number of these disparate identities under a meaningful banner was *Nouvelle Tendence* (New Tendency) held in Zagreb, Yugoslavia, in October 1961. The invitational exhibition included sixty artists working independently or as part of a group, and drew international attention to the latest experiments in concrete art. In the next few years, a



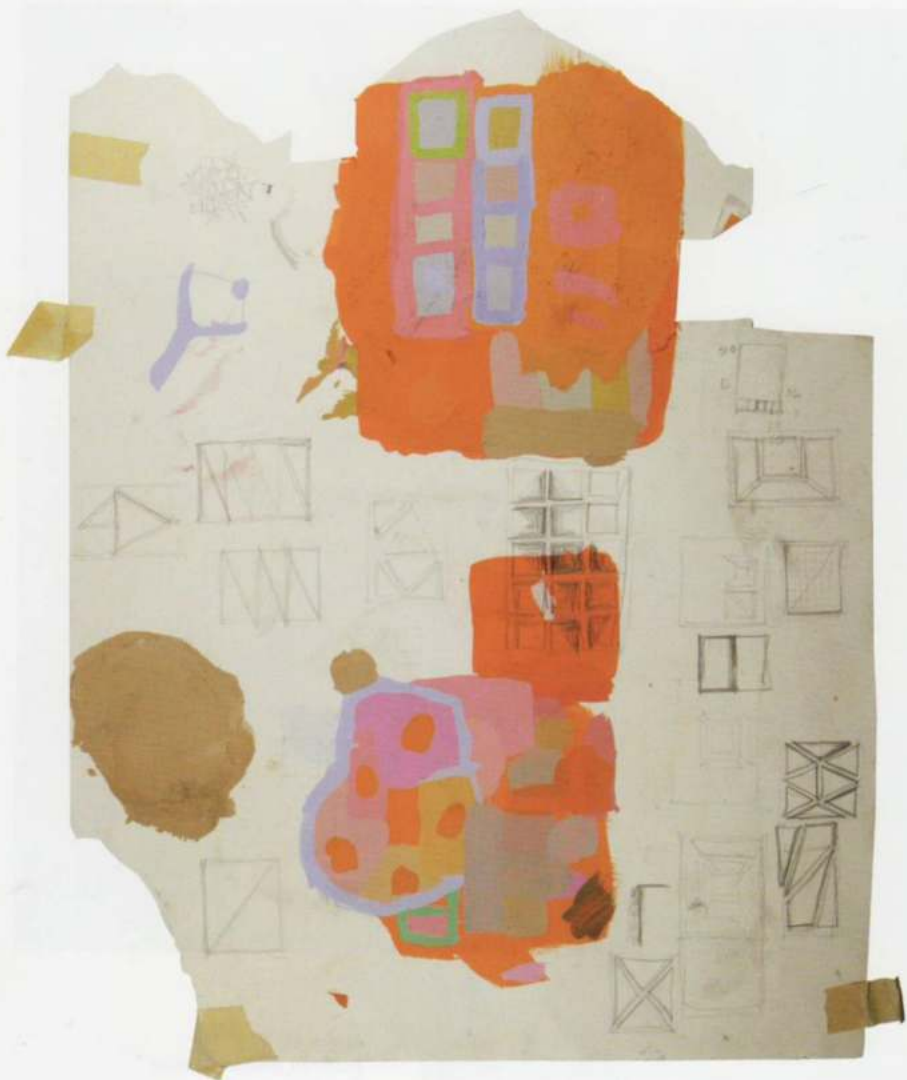
Above: Fig. 57
Richard Anuszkiewicz
 American, born 1930
Untitled
 1961
 Oil on canvas
 54 x 52 in. (137.2 x 132.1 cm)
 Private collection, Columbus, Ohio
 © Richard Anuszkiewicz/Licensed by VAGA, New York, New York

loosely defined movement formed under the name New Tendency, and similar exhibitions were mounted in Yugoslavia and elsewhere in Europe. The group, which also included artists from the US and Great Britain, gave shape to a growing phenomenon of perceptual art.



Left: Fig. 58
Carlos Cruz-Diez
 Venezuelan, born 1923
An Optical Modulation of the Surface
 (Modulación Óptica de la superficie)
 1957
 Wood and acrylic
 27 x 29 1/2 in. (68.5 x 74 cm)
 Courtesy of Atelier Cruz-Diez and Sicardi Gallery, Houston, Texas © 2006 Artists Rights Society (ARS), New York/ADAGP, Paris

- 1 Many Abstract Expressionist artists were trained in Bauhaus principles by Albers. However, this was only a part of a broad multidisciplinary experimental program at Black Mountain, a fertile ground for such artists as Merce Cunningham and Robert Rauschenberg.
- 2 "Budapest Bauhaus" was the nickname for the Mehely Academy. Vasarely was a student of Alexander Bortnyik, a graduate of the Bauhaus, from whom he learned the Bauhaus principles of color and optics of Itten and Albers.
- 3 Max Bill, "Structure as Art? Art as Structure?" in György Kepes, ed., *Structure in Art and Science*, New York (George Braziller) 1965, p. 15.
- 4 And later in the decade Peter Sedgley and Bridget Riley founded the British cooperative SPACE (Space Provision Artistic, Cultural and Educational).



Above: Fig. 59

Richard Anuszkiewicz

American, born 1930

Untitled sketch

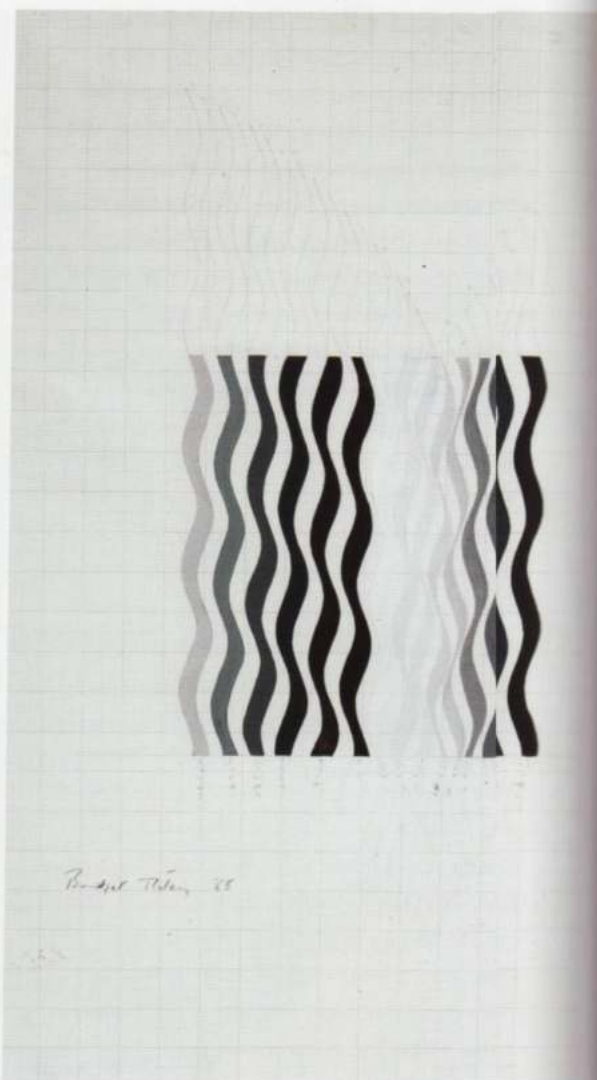
Undated

Acrylic and pencil on paper

18 x 13½ in. (45.7 x 34.3 cm)

Private collection

© Richard Anuszkiewicz/Licensed by VAGA,
New York, New York



Above: Fig. 60

Bridget Riley

British, born 1931

Untitled XXI

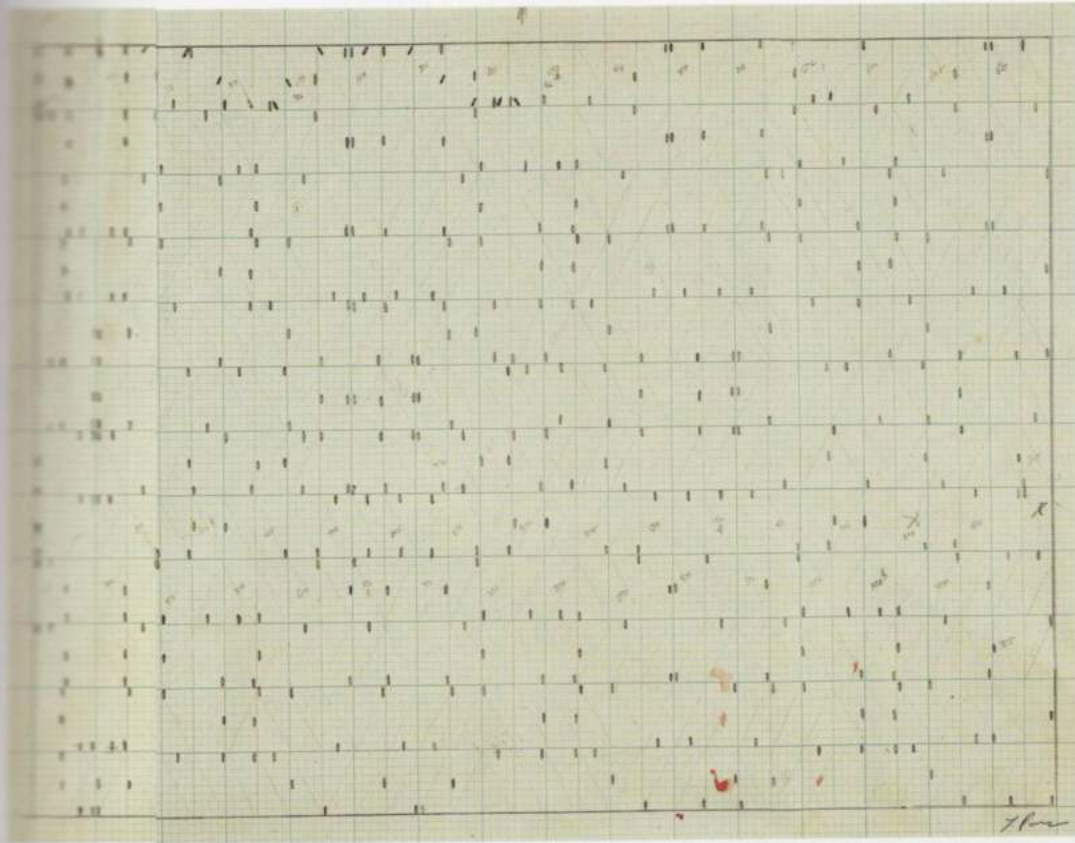
1965

Gouache and pencil on graph paper

28 x 16 in. (71.1 x 40.6 cm)

Private collection

Courtesy of PaceWildenstein, New York, New York.
Photography by Kerry Ryan McFate © 2006 Bridget
Riley. All Rights Reserved



Left: Fig. 61

Larry Poons

American, born Japan 1937

Untitled

1962

Graphite and red watercolor on graph

paper with blue lines

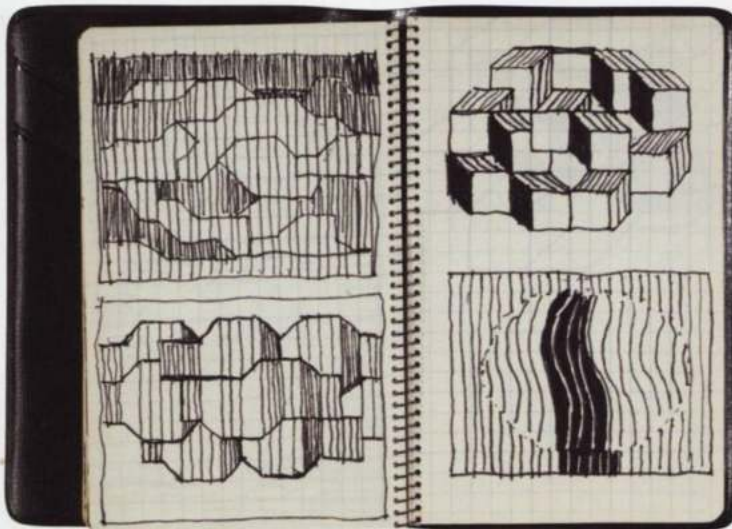
13 x 17 in. (33 x 43.2 cm)

National Gallery of Art, Washington, D.C.:

Andrew W. Mellon Fund

1975.56.1 B-28489/DR

Photography by Dean Beason © 2006 Board of
Trustees, National Gallery of Art, Washington © Larry
Poons/Licensed by VAGA, New York, New York



Left: Fig. 62

Julian Stanczak

American, born Poland 1928

Untitled sketches

1958

Ink in sketchbook

5 1/4 x 8 1/2 in. (13.3 x 21.6 cm), open

Collection of the artist

Courtesy of the Artist

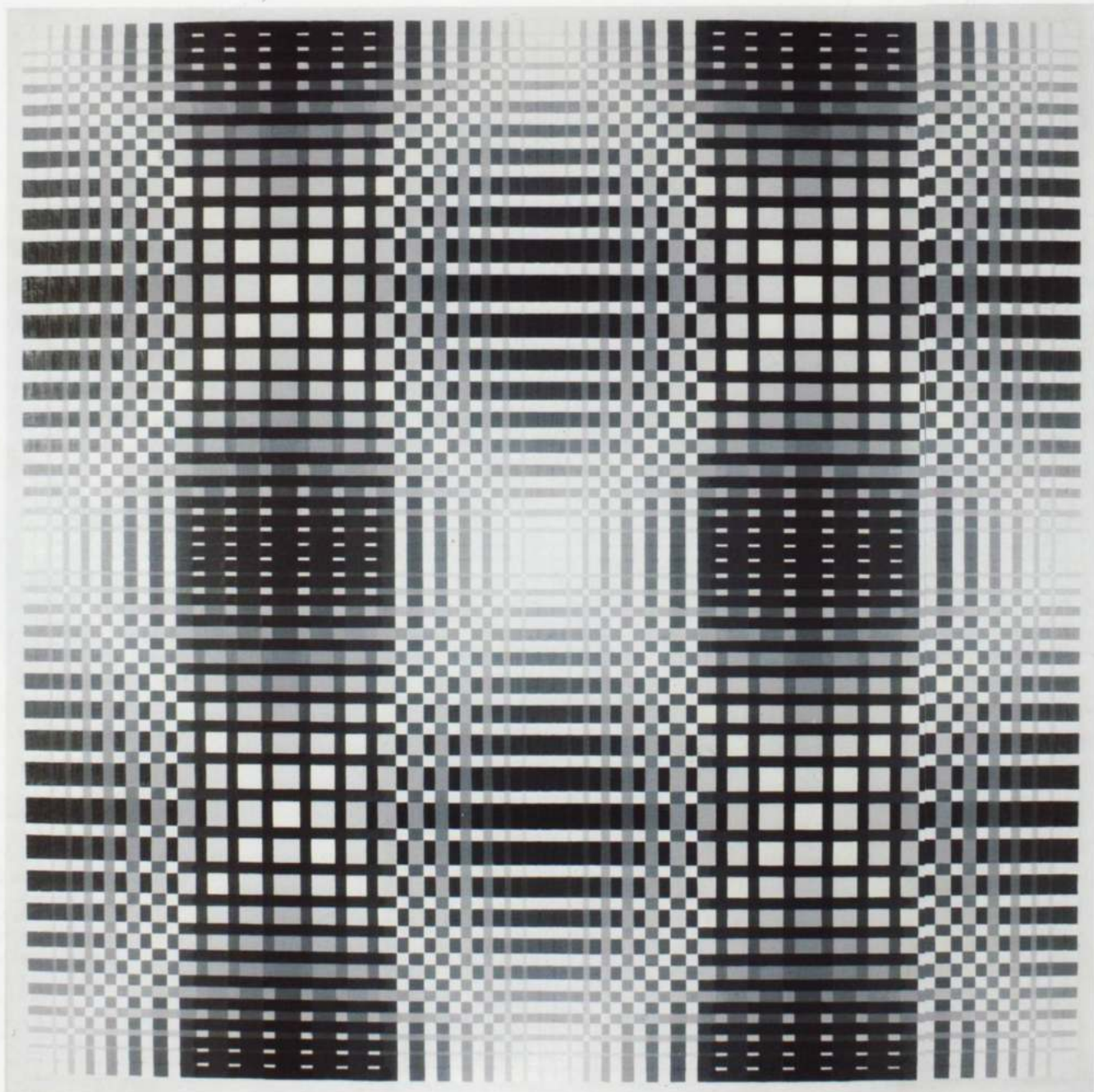


Fig. 63

Ed Mieczkowski

American, born 1929

Labyrinth

1967

Acrylic on canvas on board

48 x 48 in. (121.9 x 121.9 cm)

The Marilyn and Carl Thoma Collection

Courtesy of LewAllen Contemporary, Santa Fe,
New Mexico © Ed Mieczkowski

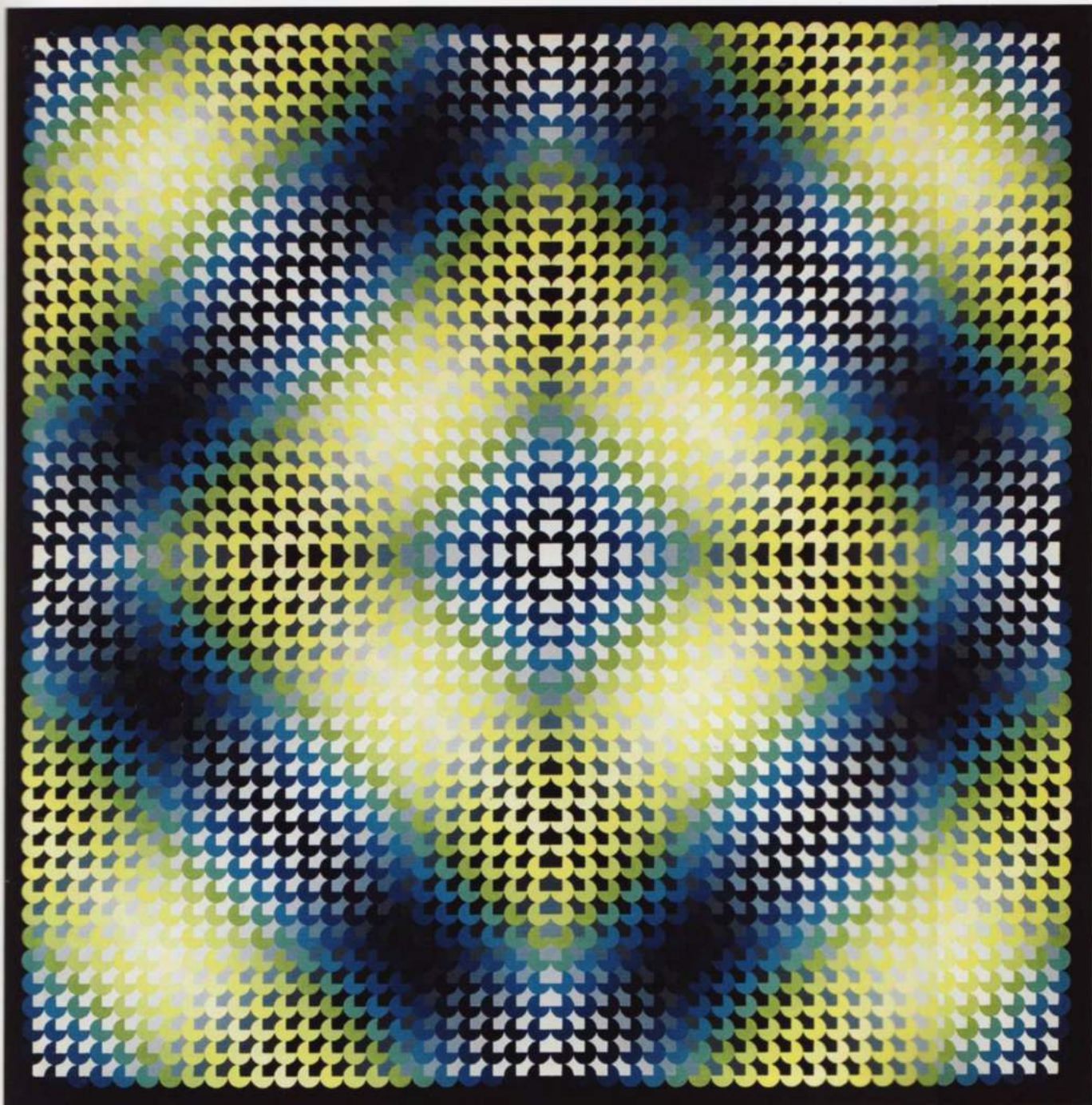


Fig. 64

Ed Mieczkowski

American, born 1929

Blue Bloc

1967

Acrylic on canvas

48 x 48 in. (121.9 x 121.9 cm)

Courtesy of LewAllen Contemporary, Santa Fe,
New Mexico © Ed Mieczkowski

