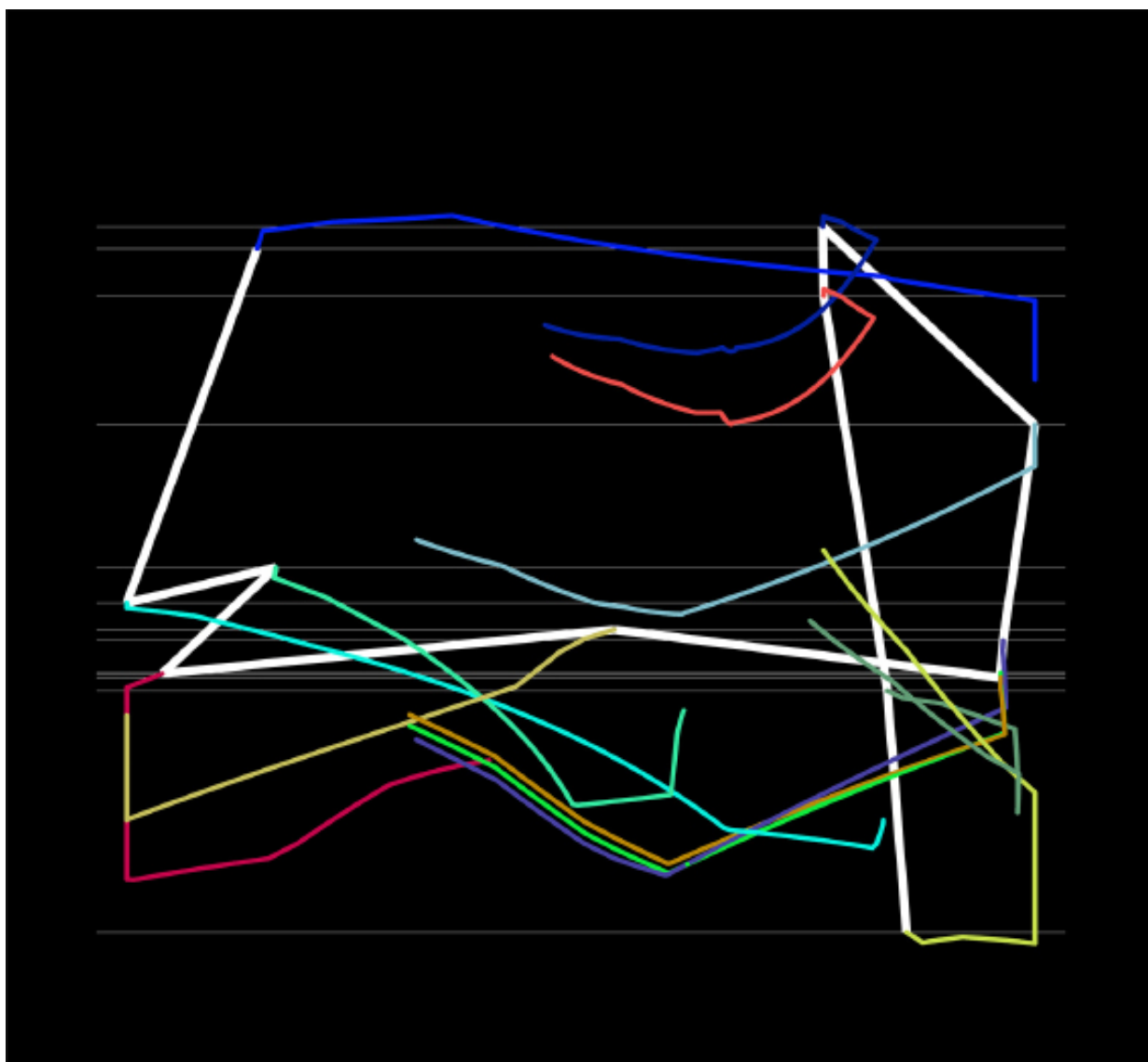




Manfred Mohr



Manfred Mohr
P2200_1577
Encre pigmenté sur papier / *Pigmented Ink on paper*
2014-2015
80 x 80 cm

Biographie

Né en 1938 à Pforzheim, Allemagne
Vit et travail à New York, USA

Manfred Mohr est considéré comme un pionnier de l'art digital. Sa pensée artistique change radicalement suite à la découverte de l'«esthétique de l'information» du Prof. Max Bense au début des années 60. Rapidement, son travail évolue d'un expressionnisme abstrait vers une géométrie algorithmique générée par ordinateur. Encouragé par le compositeur de musique algorithmique Pierre Barbaud, qu'il rencontre en 1967, Mohr programme ses premiers dessins à l'ordinateur en 1969.

Son travail fait partie de plusieurs collections : Centre Pompidou, Paris; Joseph Albers Museum, Bottrop; Mary and Leigh Block Museum of Art, Chicago; Victoria and Albert Museum, London; Ludwig Museum, Cologne; Wilhelm-Hack-Museum, Ludwigshafen; Kunstmuseum Stuttgart, Stuttgart; Stedelijk Museum, Amsterdam; Museum im Kulturspeicher, Würzburg; Kunsthalle Bremen, Bremen; Musée d'Art Moderne et Contemporain, Strasbourg; Daimler Contemporary, Berlin; Musée d'Art Contemporain, Montreal; Borusan Art Collection, Istanbul; McCrory Collection, New York; Esther Grether Collection, Basel.

Nombreuses expositions personnelles / retrospectives dans des musées et galeries dans le monde lui ont été consacrées : ARC - Musée d'Art Moderne de la ville de Paris, Paris 1971 ; Joseph Albers Museum, Bottrop 1998 ; Wilhelm-Hack-Museum, Ludwigshafen 1987, 2002 ; Museum for Concrete Art, Ingolstadt 2001; Kunsthalle Bremen, Bremen 2007 ; Museum im Kulturspeicher, Würzburg 2005; Grazyna Kulczyk Foundation, Poznan 2007; ZKM - Media Museum, Karlsruhe 2013; Featured Artist at Art Basel, Basel 2013.

Son travail a été exposé au MoMA - Museum of Modern Art, New York 1980; Centre Pompidou, Paris 1978, 1992; ZKM (Center for Art and Media), Karlsruhe 2005, 2008, 2010; Museum Ritter, Waldenbuch 2005, 2006, 2008, 2013; Museo Nacional Centro de Reina Sofia, Madrid 1989; MoCA, Los Angeles 1975; National Museum of Modern Art, Tokyo 1984; Museum of Modern Art, San Francisco 1973, 1977, 1980; MoMA-PS1, New York 2008; MACM - Musée d'Art Contemporain, Montreal 1974, 1985, 2013; Fundacion Banco Santander, Madrid 2014; Muzeum Sztuki, Lodz 1981, 2011; Neue Nationalgalerie, Berlin, 1999; Leo Castelli Gallery, New York 1978; Galerie Paul Facchetti, Paris 1965 et Zürich 1970.

Parmi les prix que Manfred Mohr a reçu on peut compter : ACM SIGGRAPH Distinguished Artist Award for Lifetime Achievement in Digital Art, 2013; [ddaa] d.velop Digital Art Award, Berlin 2006; Artist Fellowship, New York Foundation of the Arts, New York 1997; Golden Nica from Ars Electronica, Linz 1990; Camille Graesser-Preis, Zürich 1990.



Manfred Mohr
P-455a
1990
Plotter Drawing
70 x 70 cm

Biography

Born 1938, Pforzheim, Germany
Lives and works in New York, USA

Manfred Mohr is considered a pioneer of digital art. After discovering Prof. Max Bense's «information aesthetics» in the early 1960's, Mohr's artistic thinking was radically changed. Within a few years, his art transformed from abstract expressionism to computer generated algorithmic geometry. Encouraged by the computer music composer Pierre Barbaud whom he met in 1967, Mohr programmed his first computer drawings in 1969.

Some of the collections in which he is represented: Centre Pompidou, Paris; Joseph Albers Museum, Bottrop; Mary and Leigh Block Museum of Art, Chicago; Victoria and Albert Museum, London; Ludwig Museum, Cologne; Wilhelm-Hack-Museum, Ludwigshafen; Kunstmuseum Stuttgart, Stuttgart; Stedelijk Museum, Amsterdam; Museum im Kulturspeicher, Würzburg; Kunsthalle Bremen, Bremen; Musée d'Art Moderne et Contemporain, Strasbourg; Daimler Contemporary, Berlin; Musée d'Art Contemporain, Montreal; Borusan Art Collection, Istanbul; McCrory Collection, New York; Esther Grether Collection, Basel.

Mohr has had many one-person shows / retrospectives in museums and galleries like: ARC - Musée d'Art Moderne de la ville de Paris, Paris 1971; Joseph Albers Museum, Bottrop 1998; Wilhelm-Hack-Museum, Ludwigshafen 1987, 2002; Museum for Concrete Art, Ingolstadt 2001; Kunsthalle Bremen, Bremen 2007; Museum im Kulturspeicher, Würzburg 2005; Grazyna Kulczyk Foundation, Poznan 2007; ZKM - Media Museum, Karlsruhe 2013; Featured Artist at Art Basel, Basel 2013.

He took part in innumerable group shows for example at: MoMA - Museum of Modern Art, New York 1980; Centre Pompidou, Paris 1978, 1992; ZKM (Center for Art and Media), Karlsruhe 2005, 2008, 2010; Museum Ritter, Waldenbuch 2005, 2006, 2008, 2013; Museo Nacional Centro de Reina Sofia, Madrid 1989; MoCA, Los Angeles 1975; National Museum of Modern Art, Tokyo 1984; Museum of Modern Art, San Francisco 1973, 1977, 1980; MoMA-PS1, New York 2008; MACM - Musée d'Art Contemporain, Montreal 1974, 1985, 2013; Fundacion Banco Santander, Madrid 2014; Muzeum Sztuki, Lodz 1981, 2011; Neue Nationalgalerie, Berlin, 1999; Leo Castelli Gallery, New York 1978; Galerie Paul Facchetti, Paris 1965 und Zürich 1970.

Among the awards he received are: ACM SIGGRAPH Distinguished Artist Award for Lifetime Achievement in Digital Art, 2013; [ddaa] d.velop Digital Art Award, Berlin 2006; Artist Fellowship, New York Foundation of the Arts, New York 1997; Golden Nica from Ars Electronica, Linz 1990; Camille Graesser-Preis, Zürich 1990.

Expositions / Exhibitions

Personnelles / Solo

- 2016 Manfred Mohr., Galerie Charlot, Paris, France
Manfred Mohr: Visuell, Musikalisch, Galerie [DAM], Berlin, Germany
Manfred Mohr: Artificiata II, Carroll / Fletcher, London, UK
- 2015 Manfred Mohr: Artificiata I, bitforms, New York, USA
Manfred Mohr, Galerie Mueller-Roth, Stuttgart, Germany
Manfred Mohr: Pioneer of Algorithmic Art, Simons Center Gallery, Simons Center for Geometry and Physics (SCGP), Stony Brook, USA
Works from from 2013 – 2015, Galerie Wack, Kaiserslautern, Germany
- 2014 Evolving Geometries: Line, Form, and Colour, Centre for the Arts at Virginia Tech, Blacksburg, USA
Artificiata I + II, OEI Colour Project, Stockholm, Sweden
- 2013 Artificiata II, Galerie [DAM], Berlin; Galerie Mueller-Roth, Stuttgart, Germany
The Algorithm of Manfred Mohr. 1963–now, ZKM | Media Museum, Karlsruhe, Germany
- 2012 One and Zero, Carroll / Fletcher, London, UK
Think Line 2, Galerie [DAM], Berlin, Germany
- 2011 1964–2011, Réflexions sur une esthétique programée, bitforms gallery, NYC, USA
parallelResonance, Galerie [DAM], Berlin, Germany
- 2009 Generative Arbeiten, Galerie Lausberg, Düsseldorf, Germany
- 2008 Klangfarben, bitforms gallery, New York City, USA
Art Stations Preview – It from Bit, Grazyna Kulczyk Foundation, Poznan, Poland
Bildschirmarbeiten, Bilder & Zeichnungen, Galerie La Ligne, Zürich, Switzerland
- 2007 Klangfarben, Galerie Mueller-Roth, Stuttgart, Germany
Broken Symmetry, Kunsthalle, Bremen, Germany
DDAD Award, Landesvertretung, Bremen, Germany
- 2006 Subsets, bitforms gallery, New York City, USA
- 2005 Zeichnungen aus 30 Jahren, Museum Kulturspeicher, Würzburg, Germany
subsets, Galerie Wack, Kaiserslautern, Germany
- 2004 space.colour.motion, DAM, Berlin, Germany
- 2003 space.colour.motion, Galerie Mueller-Roth, Stuttgart
- 2002 space.colour.motion, bitforms gallery, New York, USA
Wilhelm-Hack-Museum, Ludwigshafen, Germany
- 2001 Museum für Konkrete Kunst, Ingolstadt, Germany Galerie Wack, Kaiserslautern, Germany
- 1998 European Art Concrete, Berlin Josef Albers Museum, Bottrop, Germany
- 1994 Galerie der Stadt Stuttgart, Stuttgart, Germany
- 1991 Galerie Heinz Teufel Bad- Münstereifel-Mahlberg, Germany
ACP Galerie, Zurich, Switzerland
- 1990 Dürhammer Galerie, Frankfurt, Germany
- 1989 Prakapas Gallery, New York City, USA
- 1988 Reuchlin Museum, Pforzheim, Germany
- 1987 Wilhelm-Hack-Museum, Ludwigshafen, Germany
- 1986 Galerie Jeanne Buytaert, Antwerp, Belgium
- 1983 Art Research Center, Kansas City, USA
- 1978 Galerie Heinz Teufel, Köln Galerie S:t Petri, Lund, Sweden
- 1976 Galerie Media, Neuchâtel, Switzerland
Galerie Mueller-Roth, Stuttgart, Germany
- 1974 Galerie Pierre Weiller, Paris, France
Galerie Gilles Gheerbrant, Montréal, USA
- 1973 Galerie Edith Wahlandt, Schwäbisch Gmünd, Germany
- 1972 Galerie Hendrike Swart, Amsterdam, Netherlands
- 1971 Une esthétique programmée, ARC, Musée d'Art Modern de la Ville de Paris, Paris, France
Galerie Mangelgang, Groningen, Netherlands
- 1969 Galerie Anne-Marie Verna, Zürich, Switzerland
- 1968 Galerie Daniel Templon, Paris, France

Expositions collectives recentes / *Recent group shows*

Liste complète à la fin du document / *Complete list at the end of the doc*

- 2016 The Thinking Machine. Ramon Llull and the Ars combinatorial, (CCCB), Barcelona, Spain
Stankowski & Co., Stiftung für konkrete Kunst. Reutlingen, Germany
Drawing after Digital, XPO Studio, Paris, France
Code + Poetry, Galerie [DAM], Berlin, Germany
Deck Voyage, Borusan Contemporary, Istanbul, Turkey
Electronic Superhighway, Whitechapel Gallery, London, UK
Visible Histories, Abrons Arts Center, New York, USA
The Onward of Art: American Abstract Artists 80th Anniversary Exhibition, 1285 Avenue of the Americas Art Gallery, New York, USA
- 2015 Endless, Entire: American Abstract Artists, FiveMyles Art Center, New York, USA
Mankind / Machinekind, Galerie Krinzinger, Vienna, Austria
DRKRM, DAM Gallery, Berlin, Germany
I got Rhythm. Kunst und Jazz seit 1920, Kunst Museum Stuttgart, Germany
Software, Hard Problem, Cubitt Art Center, London, UK
Digital Art @ Sony Center Screen, Sony Center Screen, Berlin, Germany
Luminous Flux 2.0, Thoma Foundation, Art House, Sante Fe, USA
Art + Computer / Time, Brattleboro Museum & Art Center, Brattleboro, USA
50 Years of Computer Generated Art, DAM Gallery, Berlin, Germany
Rendezvous of Countries, Museum im Kulturspeicher, Würzburg, Germany
A Square is a Square is a Square...Highlights from the Marli Hoppe-Ritter Collection, Museum Ritter, Waldenbuch, Germany
Aesthetica: 50 years of Computer Generated Art, DAM Gallery, Berlin, Germany
Art15, DAM Gallery booth, London, UK
Short Cuts, CentrePasquArt, Biel, Switzerland
Perspectives on Archeology: From Modernity to Present Day, D&F Contemporary, New York, USA
RAM Rethinking Art & Machine, Art Gallery of Nova Scotia, Halifax, Canada
How to Construct a Time Machine, MK Gallery, Milton Keynes, UK
American Abstract Artists 75th Anniversary, Vanderbilt University Fine Arts Gallery, Nashville, USA
- 2014 Konkret, Milan Dobes Museum, Bratislava, Slovakia
Luminous Flux, Digital and Geometric Art from the Thoma Foundation, Art House, New Mexico, USA
Die Kunst des Weglassens, Neue Sachsische Galerie, Museum für zeitgenössische Kunst, Chemnitz
Weiss Inspiriert, Galerie Linde Hollinger, Ladenburg, Germany
Pencil / Line / Eraser, Carroll / Fletcher, London, UK
American Abstract Artists 75th Anniversary, University of Mary Washington Galleries, Fredericksburg; Martin Art Gallery, Muhlenberg College, Allentown, USA
Common Ground: Earth, Borusan | Contemporary, Istanbul, Turkey
- 2013 Light. Art. Kinetics, Museum Ritter, Waldenbuch, Germany
American Algorists: Linear Sublime, Westside Gallery, School of Visual Arts, New York, USA
Suzanne H. Arnold Gallery, Lebanon Valley College, Annville, USA
Zdenek Sykora: In Select Society, GAML, Louny, Czech Republic
Mathematical Rhythms, Boston Cyberarts Gallery, Boston, USA
American Abstract Artists - A Selection, School of Art Gallery, Kent State University, Ohio, USA

Prix / Awards

- 2013 ACM SIGGRAPH Lifetime Achievement in Digital Art Award
2006 d.velop Digital Art Award
1997 Artists' Fellowship, New York Foundation for the Arts
1990 Golden Nica (Computer Graphics), Prix Ars Electronica
Camille Graeser Prize
1973 10th Ljubljana Print Biennale

Collections

Espace de l'Art Concret, Donation Albers-Honegger, Mouans-Sartoux, France
Musée National d'Art Moderne, Centre Pompidou, Paris, France
Bibliothèque Nationale, Paris, France
Ministère des Affaires Culturelles, Paris, France
Museum Ritter, Sammlung Marli Hoppe-Ritter, Waldenbuch, Germany
Kunstsammlung der Sparkasse Pforzheim-Calw, Germany
Sammlung DaimlerChrysler, Stuttgart, Germany
Museum für Konkrete Kunst Ingolstadt, Germany
Leopold-Hoesch-Museum Düren, Germany
Museum Ludwig, Cologne, Germany
Staatliche Museen Preussischer Kulturbesitz, Nationalgalerie Berlin, Germany
Städt. Museum Würzburg, Germany
Wilhelm-Hack-Museum, Ludwigshafen, Germany
Sammlung der Kreissparkasse Stuttgart, Germany
Ministerium für Wissenschaft und Kunst Staatsgalerie Stuttgart, Germany
Stadtbücherei Stuttgart, Germany
The Tel Aviv Museum of Art, Tel Aviv, Israel
Quadrat - Josef Albers Museum, Bottrop, Germany
Sammlung der Stadt Pforzheim, Germany
Kunstmuseum Stuttgart, Germany
Ulmer Museum, Museum der Stadt Ulm, Germany
Sammlung der Bundesrepublik Deutschland, Bonn, Germany
Museum Pfalzgalerie, Kaiserslautern, Germany
Sammlung Etzold, Städt. Museum Abteiberg, Mönchengladbach, Germany
Musée des Beaux-Arts, Montréal, Canada
Bibliothèque Nationale du Québec, Canada
McGill University, Montréal, Canada
Musée d'Art Contemporain Montréal, Canada
Cabinet des Estampes, Geneva, Switzerland
Musée de L'Élysée, Lausanne, Switzerland
Nationalbibliothek, Bern, Switzerland
Argauer Kunsthau Aarau, Switzerland
Victoria and Albert Museum, London, UK
MAMCS, Musée d'Art Moderne et Contemporain, Strasbourg, Germany
Muzeum Sztuki, Collection «Solidarity», Lodz, Poland
Stedelijk Museum, Amsterdam, Netherlands
Mondriaanhuis, Amersfoort, Netherlands
Szepmuveszeti Muzeum, Budapest
Museum of Contemporary Art, Zagreb, Croatia
Carleton University Art Gallery, Ottawa, Canada
Kunstmuseum Bonn, Germany
Kunsthalle Bremen, Germany
Musée de Grenoble, France
Museum für Angewandte Kunst, Cologne, Germany
Biblioteca Nacional de Lisboa, Lisbon, Portugal
Schweizerische Nationalbibliothek, Bern, Switzerland
Stiftung für Konkrete Kunst, Zürich, Switzerland
Borusan Art Collection, Istanbul, Turkey
Fine Arts Museums of San Francisco, USA
Otis Collection, Otis College, Cleveland, USA
Spencer Museum of Art, University of Kansas, Lawrence, USA
Oregon State University, Department of Art, Corvallis, USA

Manfred Mohr

«P2210-D», 2014-2015

Artificiata II

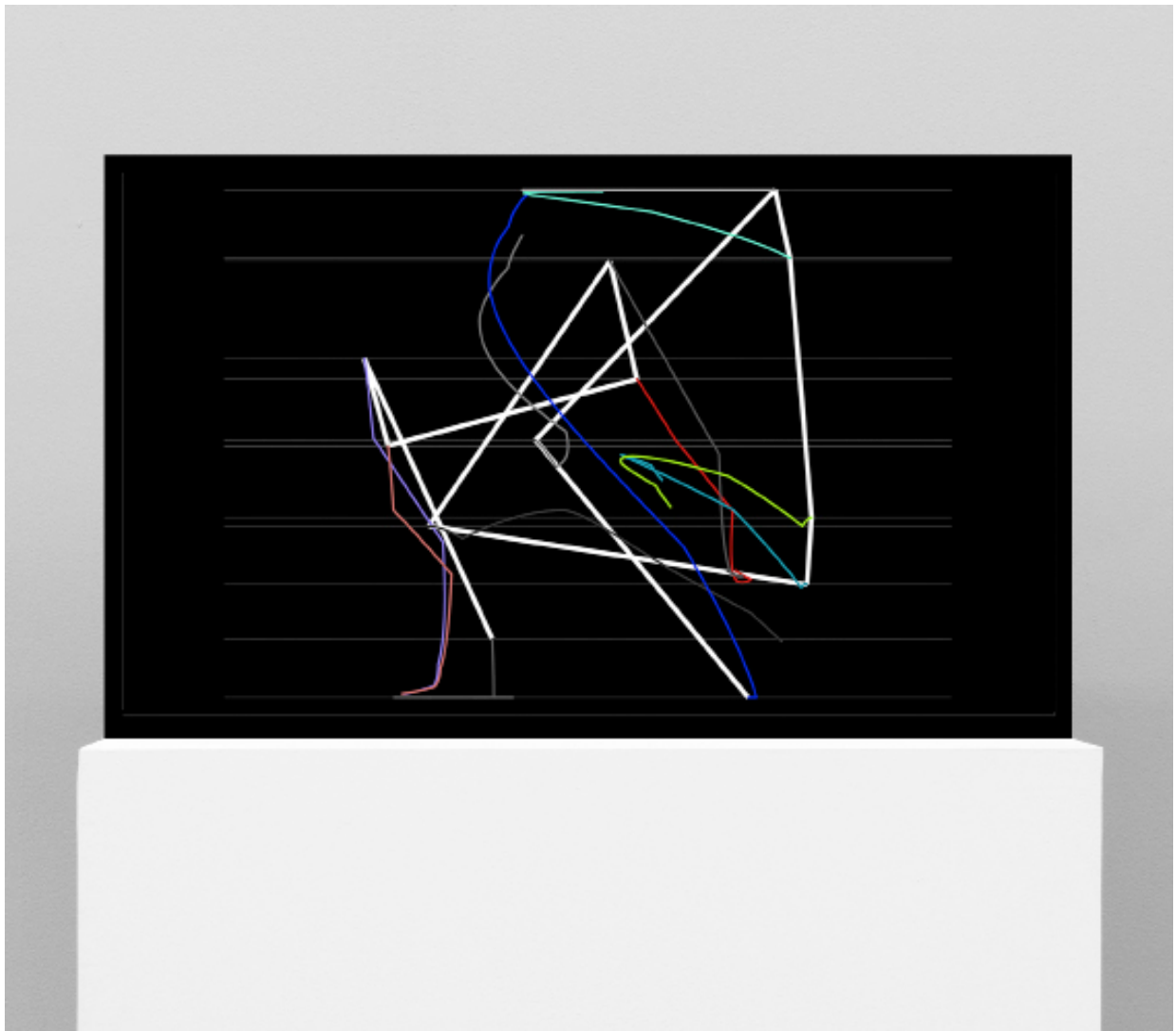
Animation algorithmique en temps réel générée par ordinateur /

Computer-generated real-time algorithmic animation

Ordinateur, cadre métal, programme spécifique / *iMac, metal case, custom software*

46 x 66 x 10,8 cm

VIDEO ICI / VIDEO HERE



Cette série d'oeuvres «P2200» présente la rotation du trajet-diagonal d'un hypercube de n dimensions (entre 11 et 15 dimensions) ainsi que le rendu visuel de l'histoire de cette rotation. Une trajet-diagonal est une ligne multi-segmentée au travers d'un hypercube de n -dimensions où chaque changement de direction signale le passage au travers une des dimensions. La ligne blanche épaisse montre le trajet-diagonal de n -dimensions pivoté projeté en 2D ; les lignes de couleurs traduisent elles, l'histoire du mouvement restreint à l'espace rectangulaire 2D.

L'animation oscille entre lignes de couleurs et lignes monochromes et ainsi génère des expériences visuelles différentes comparables au spectre sonore de la polyphonie et de l'unisson.

This work series P2200 shows a rotating diagonal-path of an n -dimensional hypercube (between eleven and fifteen dimensions) and the visual rendering of the history of that rotation. A diagonal-path is a multiple-segmented line through an n -dimensional hypercube, where each change of direction indicates the passage through a dimension. (complete description). The thick white line shows a rotated n -dimensional diagonal-path projected into 2-D and the color lines show the history of that movement restricted to the 2-D rectangular space.

The animation switches between color and monochrome lines, thus creating different visual experiences which could be compared in the sound spectrum to polyphony and unison.

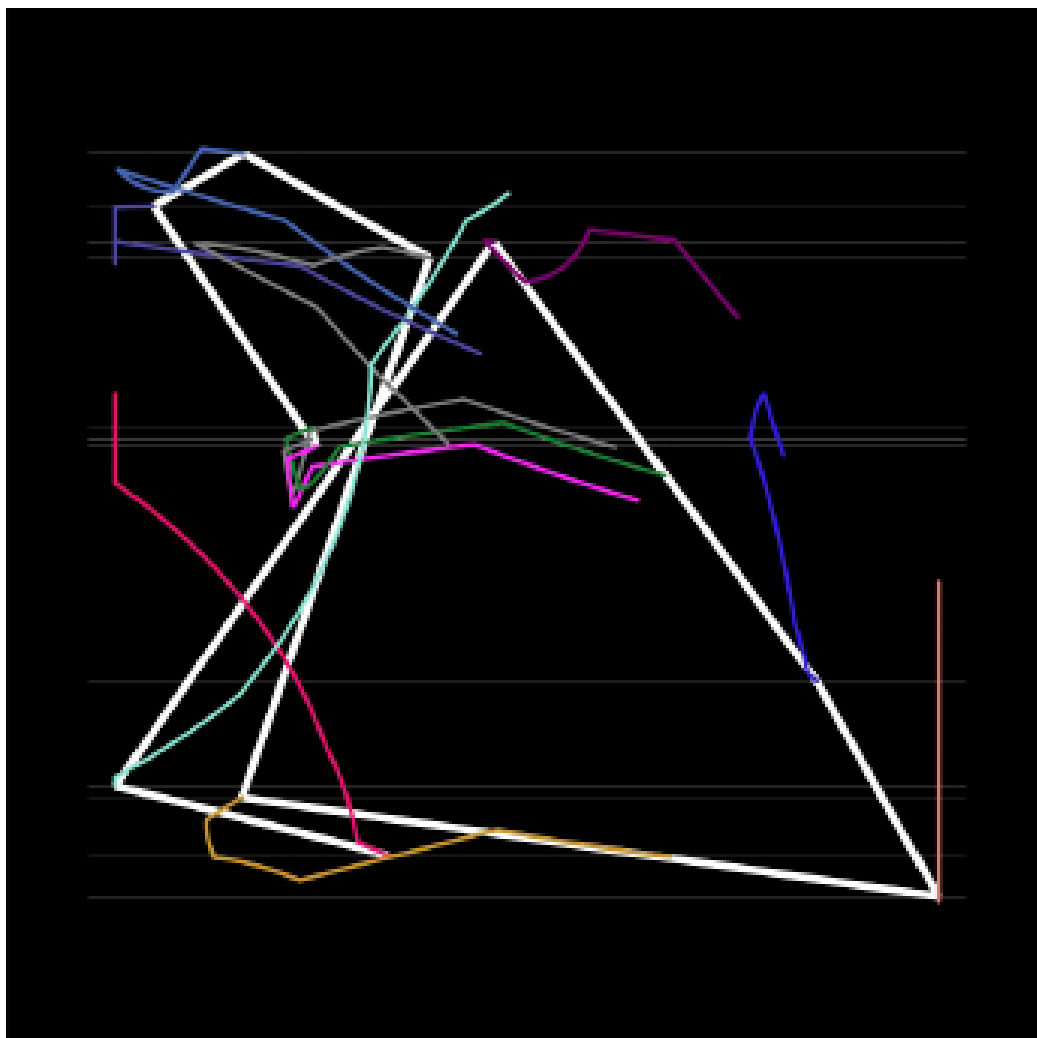
Manfred Mohr

P2200_1896

Encre pigmenté sur papier / *Pigment ink on paper*

2014-2015

80 x 80 cm



Manfred Mohr

«P1660-D»

Artificiata II

2015

Installation générative / Generative installation

Ordinateur, cadre métal, programme spécifique / *iMac, metal case, custom software*

46 x 66 x 10,8 cm

VIDEO ICI / VIDEO HERE



Cette installation montre l'ensemble des projections 2D d'un trajet-diagonal de n dimensions aléatoirement choisi entre 2 dimensions et 13 dimensions dans une séquence cyclique. Comme dans les règles de la musique dodécaphonique, chaque dimension doit être sélectionnée un fois avant que la même dimension puisse apparaître à nouveau. Les couleurs et les rotations sont choisies de façon aléatoire.

This screen based work shows all the 2-D projections of a randomly chosen n -dimensional diagonal path between 2-D and 13-D in a cyclic sequence. Similar to the rules in 12-tone music, each dimension has to be selected once before the same dimension can appear again. The colors and rotations are chosen randomly.

Manfred Mohr

P1650_A,

Encre pigmenté sur papier / *Pigment ink on paper*

Série de 12 tirage, 40 x 50 cm chaque / *Series of 12 prints each 40 x 50 cm*

2014

90 x 350 cm

Dans cette série de travaux sur papier, chaque dessin représente toutes les projections 2D d'un trajet-diagonal choisi. La série est composée de 12 dessins digitaux 40 x 50 cm chaque, un par chaque dimension entr 2D et 13D.

In this set of works on paper, each drawing depicts all the 2-D projections of a chosen n-dimensional diagonal-path. The series consists of 12 digital drawings 40x50cm, one for each dimension between 2-D and 13-D.





Manfred Mohr
P1682_1155
Encre pigmenté sur papier / Pigment Ink on paper
2014
60 x 80 cm

Manfred Mohr

«P1680-D»

Artificiata II

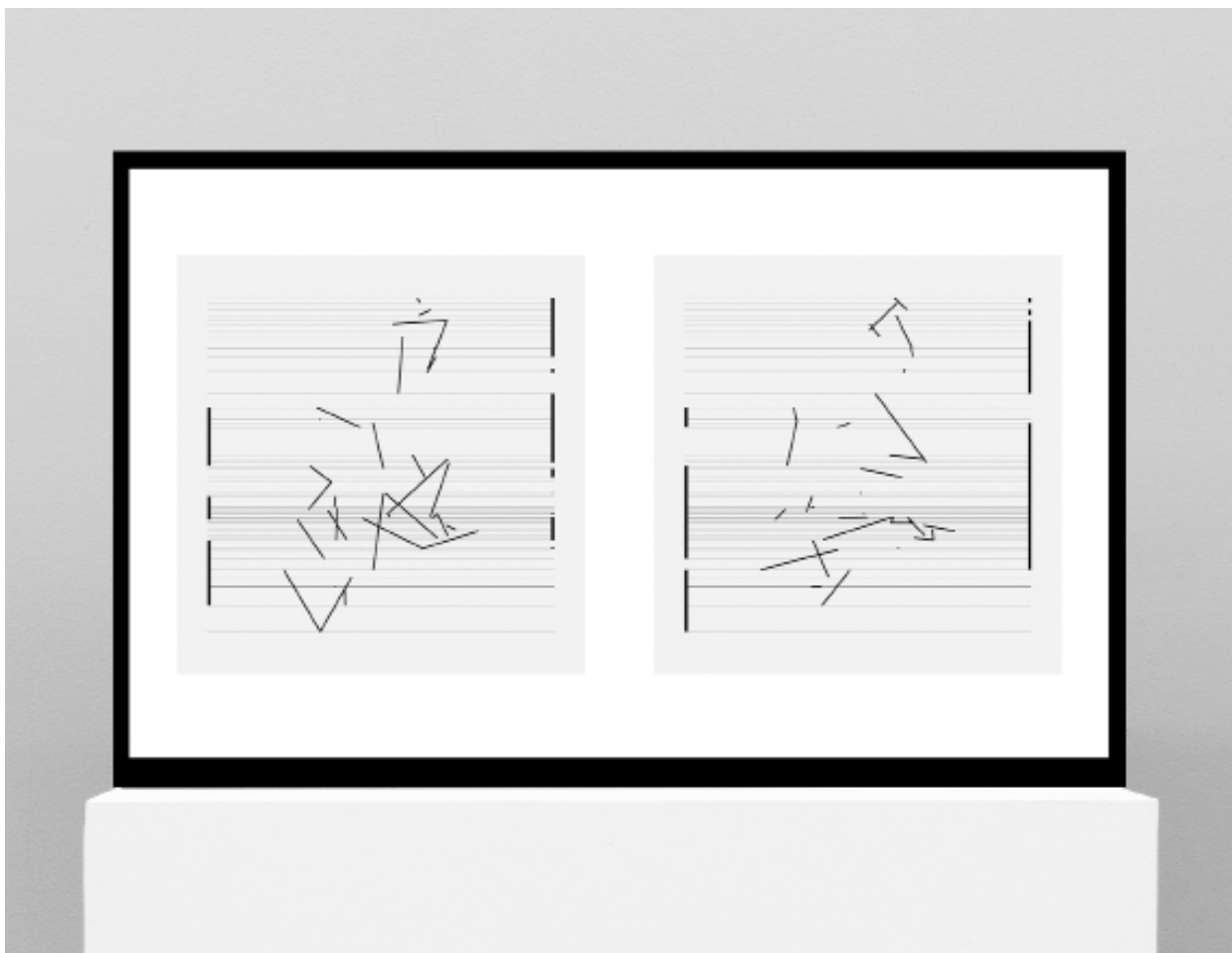
2014-2015

Installation générative / Generative installation

Ordinateur, cadre métal, programme spécifique / iMac, metal case, custom software

46 x 66 x 10,8 cm

VIDEO ICI / VIDEO HERE



Ce cycle de travail «P1682» montre la fracturation du trajet-diagonale entre les lignes numérotées en nombres paires et impaires. Une trajet-diagonale est une ligne multi-segmentée au travers d'un hypercube de n-dimensions où chaque changement de direction signale le passage au travers une des dimensions. Une trajet-diagonale à n-dimensions est montrée par ses lignes paires sur la partie gauche et celles impaires sur la partie droite de chaque dessin. Par ailleurs chaque ligne manquante apparaît au travers de lignes verticales compressées sur chacun des cotés. L'animation choisit entre 20 et 100 dimensions sur un interval de 10.

This work phase P1682 shows the fracturing of a diagonal-path into even and odd numbered lines. A diagonal path is a multiple-segmented line through an n-dimensional hypercube, where each change of direction indicates the passage through a dimension. An n-dimensional diagonal-path is shown with its even numbered lines in the left part and its odd numbered lines in the right part of each drawing. Furthermore, the respectively missing lines are shown as compressed vertical lines along the sides of each part. The animation chooses between 20 and 100 dimensions, in intervals of 10.

Manfred Mohr

P1682_540

Encre pigmenté sur papier / *Pigment ink on paper*

2014

60 x 80 cm



Manfred Mohr

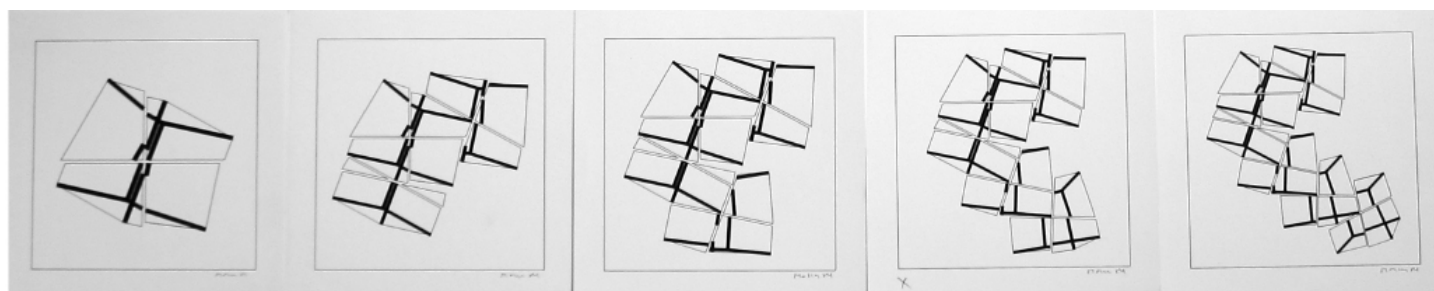
P-370-PZ

Plotter drawings on paper (framed)

12 x 12 cm each

1984

Unique piece



Manfred Mohr

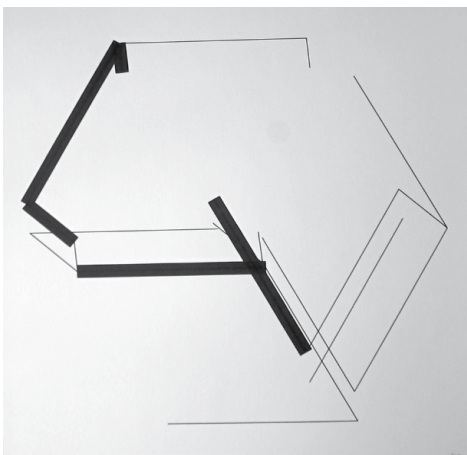
P-452/453-C_2,3

Plotter drawing on paper laminated (framed)

35 x 35 cm

1990

Unique piece



Manfred Mohr

P-452/453-C_4,5

Plotter drawing on paper laminated (framed)

35 x 35 cm

1990

Unique piece

Manfred Mohr

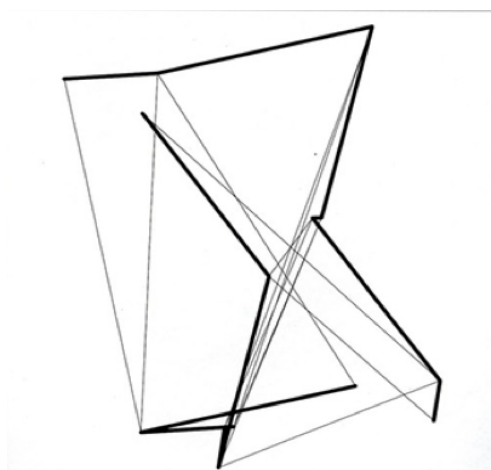
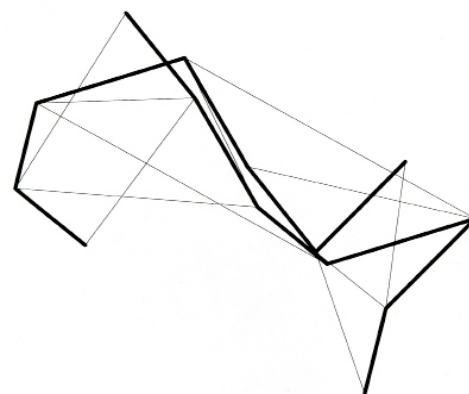
P-502-E

Plotter drawing on paper (framed)

70 x 70 cm

1996

Unique piece



Manfred Mohr

P-502-W+

Plotter drawing on paper (framed)

70 x 70 cm

1996

Unique piece

Manfred Mohr
Presse (Selection)

[Newsarttoday.tv : Galerie Charlot – Manfred Mohr, Sept 2016](#)

LIRE / READ

[Benoît Montigné, Sonore-visuel.fr : Manfred Mohr - Artificiata - Sonata Visuelle, Sept 2016](#)

LIRE / READ

[Filip Visnjic, Manfred Mohr: Artificiata II at Carroll Fletcher / 12 Feb - 2 Apr, News, 4 Mar 2016](#)

LIRE / READ

[Helen Longstreth, Manfred Mohr: Musical Dimensions, Currents, Feb. 25, 2016](#)

LIRE / READ

[Robert Barry, Manfred Mohr: These Digital Artworks Depict the Impossible-to-Visualize Hypercube, Feb 15, 2016](#)

LIRE / READ

[William Fowler, Manfred Mohr - the groovy German who taught computers to make art, 12 Feb 2016](#)

LIRE / READ

[Lauren Hutchinson talks to Manfred Mohr, the godfather of electronic art, Click, short version, 9 Feb 2016](#)

LIRE / READ

[Rhiannon McGregor and Elly Parsons, Algorithmic art: Manfred Mohr talks remix, revolution and fixing radios, Art, 4 Feb 2016](#)

LIRE / READ

Liste complète des exposition collectives

Expositions collectives / Group shows

- 2016 The Thinking Machine. Ramon Llull and the Ars combinatorial, (CCCB), Barcelona, Spain
Stankowski & Co., Stiftung für konkrete Kunst. Reutlingen, Germany
Drawing after Digital, XPO Studio, Paris, France
Code + Poetry, Galerie [DAM], Berlin, Germany
Deck Voyage, Borusan Contemporary, Istanbul, Turkey
Electronic Superhighway, Whitechapel Gallery, London, UK
Visible Histories, Abrons Arts Center, New York, USA
The Onward of Art: American Abstract Artists 80th Anniversary Exhibition, 1285 Avenue of the Americas Art Gallery, New York, USA
- 2015 Endless, Entire: American Abstract Artists, FiveMyles Art Center, New York, USA
Mankind / Machinekind, Galerie Krinzinger, Vienna, Austria
DRKRM, DAM Gallery, Berlin, Germany
I got Rhythm. Kunst und Jazz seit 1920, Kunst Museum Stuttgart, Germany
Software, Hard Problem, Cubitt Art Center, London, UK
Digital Art @ Sony Center Screen, Sony Center Screen, Berlin, Germany
Luminous Flux 2.0, Thoma Foundation, Art House, Sante Fe, USA
Art + Computer / Time, Brattleboro Museum & Art Center, Brattleboro, USA
50 Years of Computer Generated Art, DAM Gallery, Berlin, Germany
Rendezvous of Countries, Museum im Kulturspeicher, Würzburg, Germany
A Square is a Square is a Square...Highlights from the Marli Hoppe-Ritter Collection, Museum Ritter, Waldenbuch, Germany
Aesthetica: 50 years of Computer Generated Art, DAM Gallery, Berlin, Germany
Art15, DAM Gallery booth, London, UK
Short Cuts, CentrePasquArt, Biel, Switzerland
Perspectives on Archeology: From Modernity to Present Day, D&F Contemporary, New York, USA
RAM Rethinking Art & Machine, Art Gallery of Nova Scotia, Halifax, Canada
How to Construct a Time Machine, MK Gallery, Milton Keynes, UK
American Abstract Artists 75th Anniversary, Vanderbilt University Fine Arts Gallery, Nashville, USA
- 2014 Konkret, Milan Dobes Museum, Bratislava, Slovakia
Luminous Flux, Digital and Geometric Art from the Thoma Foundation, Art House, New Mexico, USA
Die Kunst des Weglassens, Neue Sachsische Galerie, Museum für zeitgenössische Kunst, Chemnitz
Weiss Inspiriert, Galerie Linde Hollinger, Ladenburg, Germany
Pencil / Line / Eraser, Carroll / Fletcher, London, UK
American Abstract Artists 75th Anniversary, University of Mary Washington Galleries, Fredericksburg; Martin Art Gallery, Muhlenberg College, Allentown, USA
Common Ground: Earth, Borusan | Contemporary, Istanbul, Turkey
- 2013 Light. Art. Kinetics, Museum Ritter, Waldenbuch, Germany
American Algorists: Linear Sublime, Westside Gallery, School of Visual Arts, New York, USA
Suzanne H. Arnold Gallery, Lebanon Valley College, Annville, USA
Zdenek Sykora: In Select Society, GAML, Louny, Czech Republic
Mathematical Rhythms, Boston Cyberarts Gallery, Boston, USA
American Abstract Artists - A Selection, School of Art Gallery, Kent State University, Ohio, USA
Playing with Geometry: Dimensions of Imagination, IAByRinTh festival, Slubice, Poland
- 2011 Drawing With Code: Works from the Anne and Michael Spalter Collection, DeCordova Museum, Lincoln, USA

- 2011 RAM – Rethinking Art and Machines, THEMUSEUM, Waterloo, Ontario, Canada
 Algorists, Kavli Institute for Theoretical Physics, Santa Barbara, USA
 Quadratisch-Praktisch-Kunst, Museum im Prediger, Schwäbisch Gmünd, Germany
 Transparency – Looking Through, Vasarely Museum, Budapest, Hungary
 Aufbruch, Malerei, und Raum, Situation Kunst, Bochum; Kunsthalle Rostock; Museum Kulturspeicher
 Würzburg; and Museum Pfalzgalerie Kaiserslautern
- 2010 Bense and the Arts, ZKM, Karlsruhe, Germany
 Escape From New York, Massey University, Wellington, New Zealand
- 2009 Digital Pioneers, Victoria and Albert Museum, London, UK
 Das Quadrat in der Sammlung, Stiftung für konkrete Kunst, Reutlingen, Germany
 GAMESnogames, Gesellschaft für Kunst und Gestaltung, Bonn, Germany
 Reconnaître, Museum Paksi Keptar, Paks, Hungary
 L'Oblique: un regard sur la géométrie contemporaine, Musée Chateau de Montéliard, France
 Escape From New York, RMIT University, Melbourne, Australia
 ARTWARE5 biennial, Galerie Miro Quesada Garland Miraflores, Lima, Peru
 Line + Concept, MediaRumte, Brussels, Belgium
 Peruvian North American Cultural Institute, Lima
 Alles, Wilhelm-Hack-Museum, Ludwigshafen, Germany
 Regard 06: Quand la géométrie devient Art, Espace de l'Art Concret, Mouans-Sartoux, France
- 2008 Edition Fanal, Paksi Keptar Museum, Paks, Hungary
 Gegenstandslos, Gesellschaft für Kunst und Gestaltung, Bonn, Germany
 bit international. [Nove] tendencije | Computer und visuelle Forschung | Zagreb, ZKM,
 Karlsruhe, Germany
 Minus Space, MoMA/PS1, Long Island City, USA
 To Infinity and Beyond: Mathematics in Contemporary Art, Heckscher Museum, Huntington, USA
 Space, Color, and Motion, Block Museum, Northwestern University, Evanston, USA
 Ausgerechnet... Mathematik und Konkrete Kunst, Museum in Kulturspeicher, Würzburg, Germany
- 2007 Die Neuen Tendenzen, Leopold-Hoesch-Museum, Düren, Germany
 Ex Machina, Frühe Computergrafik bis 1979, Kunsthalle Bremen, Germany
 Bit International, Neue Galerie Graz, Austria
 Feedback, Laboral Centro de Arte, Gijon, Spain
- 2006 Anfänge Der Computergraphik: Aus Der Sammlung Etzold Museum Abteiberg Städtisches,
 Monchengladbach, Germany
 D.velop Digital Art Award: Five Nominees, DAM, Berlin, Germany
 Strictly Geometrical, Wilhelm-Hack-Museum, Ludwigshafen, Germany
 Scratch Code, Sonic Acts Festival, Amsterdam, Netherlands
- 2005 Konkret Kunst in Europa, collection Ruppert, Museum Kulturspeicher, Würzburg, Germany
 Angekommen, im eigenen Haus, Kunstmuseum Stuttgart, Germany
 Experiment Konkret, Museum für Konkrete Kunst, Ingolstadt, Germany
- 2004 The Algorithmic Revolution, Museum ZKM, Karlsruhe, Germany
 Szöllösi-Nagy-Nemes Collection, Művészet Malom, Szentendre, Hungary
 Sammlung Daimler Chrysler, Galerie der Stadt Sindelfingen, Germany
 Hubertus Schoeller Stiftung "...stets konkret", Leopold Hoesch-Museum, Düren
 25 Jahre Wilhelm-Hack-Museum -- 25 Jahre Sammeln, Ludwigshafen, Germany
 Digital Selection, Schick Art Gallery, Skidmore College, Saratoga Springs, USA
 Byte, Nassau County Museum Of Art, New York, USA
- 2003 Multiples, Galerie St.Johann, Saarbrücken, Germany
 Wege zur Abstraktion II, Form & Struktur, Kunstverein Schloss Plön László Vass Collection,
 Gallery of Modern Art, Veszprém, Hungary
- 2002 Kunst Auf Zeit/Art For a Time, Kabinett Burghardt Leitner, Stuttgart, Germany
 Abstract Dilemma, American Abstract Artists, Allentown, USA
- 2001 Konstruktiv-Konkrete Kunst, Josef Albers Museums, Quadrat, Bottrop, Germany
- 2000 Ligne(s) de Conduite, Château de Mouans-Sartoux, France

- 2000 Arte Contemporanea di Pforzheim, Palazzo Trissino, Vicenza, Italy
 Von Albers Bis Paik, Stiftung für Konkrete Kunst, Zurich, Switzerland
 Computer-Codes, Kunstverein Bad Durkheim, Germany
 30 Jahre Sammlung Etzold, Städt. Museum Abteiberg, Mönchengladbach, Germany
- 1999 Hommage à Vordemberge-Gildewart, Kunsthalle Dominikanerkirche, Osnabrück, Germany
 Pure Abstract Art, Mondriaanhuis, Amersfoort, Netherlands
 Geometrie Als Gestalt, Neue Nationalgalerie, Berlin, Germany
- 1998 Immerzeit II, Forum Konkreter Kunst, Erfurt, Germany
 Art Construit Estampes, Atelier Fanal, Fondation Louis Moret, Martignay, France
 Abstraction And Algorithms, The Williams Gallery, Princeton, USA
- 1997 Movement - Bewegung, European Art Concrete, Berlin, Germany
 Magie Der Zahl, Staatsgalerie Stuttgart, Germany
- 1996 Confronto Internazionale 1996, Centro Culturale Sincron, Brescia, Italy
- 1995 In Teilen, Stiftung für Konkrete Kunst, Reutlingen, Germany
 Reconstructivism, New Geometric Paintings, Space 504, New York, Curator Peter Frank
 Laszlo Moholy-Nagy: Idee Und Wirkung, Kunsthalle Bielefeld, Germany
- 1994 Aspects Actuels De La Mouvance Construite, Musée Royal des Beaux-Arts, Anvers, Belgium
 30x30, Wilhelm-Hack-Museum, Ludwigshafen, Germany
 Konstruktiv-Konkret, Kunstverein Wolfsburg, Wolfsburg, Germany
- 1993 '68 Kunst und Kultur, Museum Gladbeck, Germany
 33 Pforzheimer Künstler, Rathaus Pforzheim, Germany
- 1992 Calculated Images, Robert Hull Fleming Museum, Burlington, USA
 Regard Multiple, Musée National de l'Art Moderne, Paris, France
 Zufall Als Prinzip, Wilhelm-Hack-Museum, Ludwigshafen, Germany
- 1990 Preisträger Der Camille-Graeser-Stiftung Zürich, Böhm, Brand, Mohr, Galerie Teufel, Cologne, Germany
 Europa 90, Centro Culturale Sincron, Brescia, Italy
 Universal Progression, Manezh, Moscow, Russia
- 1989 Aus Dem Würfel Museum, Karl-Ernst-Osthaus Museum, Hagen, Germany
 Simposium De Arte Sistemática Y Constructiva, La Reina Sofia, Madrid, Spain
- 1988 Crash, Wright Museum of Art, University of Wisconsin, Madison, USA
 Kunst In Der Provinz, Städt. Museum Schwäbisch Gmünd, Austria
- 1987 Artists In The Computer Age, MIT Museum, Cambridge, USA
 Artware, Hanover Messe, Hanover, Germany
 Mathematik In Der Kunst Der Letzten 30 Jahre, Wilhem-Hack-Museum, Ludwigshafen, Germany
 2nd Emerging Expression Biennale, The Bronx Museum of the Arts, New York, USA
- 1986 Ein Zeitdokument, Sammlung Etzold, Abteiberg, Germany
 Digitart, Szepmuveszeti Muzeum, Budapest, Hungary
- 1985 Vom Klang Der Bilder, Staatsgalerie Stuttgart, Germany
- 1984 Mathematics And Twentieth Century Art, Baruch College, New York, USA
 Die Sprache Der Geometrie, Kunstmuseum Bern, Switzerland
 Constructivism And The Geometric Tradition, 3rd Wanderausstellung der McCrory Collection
 National Museum of Modern Art, Tokyo, Japan
 Hokkaido Museum of Modern Art, Sapporo, Japan
- 1983 The Computer and its Influence on Art and Design Sheldon Memorial Art Gallery, Lincoln, USA
 Electra, Musée d'Art Moderne, Paris, France
- 1982 Die Handzeichnung Der Gegenwart II, Staatsgalerie Stuttgart, Germany
 Deutsche Zeichnung Der Gegenwart, Museum Ludwig, Cologne, Germany
- 1981 Constructivism And The Geometric Tradition, 2nd Wanderausstellung der McCrory Collection
 Ars + Machina I, Institut Franco-Americain, Rennes, France
 Konstrukcja W Procesie, Lodz, Poland

- 1980 Constructivism And The Geometric Tradition, Wanderausstellung der McCrory Collection
Printed Art, A View Of Two Decades, Museum of Modern Art, New York, USA
- 1979 Cybernetic Symbiosis, University of Berkeley, Berkeley, USA
Constructivism And The Geometric Tradition, Wanderausstellung der McCrory Collection
Albright-Knox Art Gallery, Buffalo, New York, USA
- 1978 Recherche et Creation, Centre Pompidou, Paris, France
Numerals, Leo Castelli Gallery, New York, USA
Lettres, Signes, Ecritures, Malmö Konsthall, Sweden
Art Of The Space Era, Huntsville Museum of Art, Huntsville, USA
- 1977 12th Biennale, Ljubljana, Slovenia
Decada 70, São Paulo, Brazil
- 1976 Anamorphoses, Musée des Arts Decoratifs, Paris, France
Systemes et Series, Musée des Beaux-Arts, Besançon, France
Canadian Computer Show, Montréal, Canada
- 1975 Grafik Biennale, Vienna, Austria
11th Biennale, Ljubljana, Slovenia
- 1974 Cybernetic Artrip, Tokyo
Young German Artists, New School Art Gallery, New York, Usa
Le Musee Cybernetique, Musée d'Art Contemporain, Montréal, Canada
Miedzynarodowe Biennale Grafiki, Krakow, Poland
- 1973 10th Biennale, Ljubljana, Slovenia
Programm - Zufall - System, Städt.Museum Mönchengladbach, Germany
World Print Competition 73, Museum of Modern Art, San Francisco, USA
Sigma, Musée des Beaux-Arts, Bordeaux, France
Tendencije-5, Zagreb, Croatia
- 1972 Computerkunst und Musikalische Texturen, Staatsgalerie Stuttgart, Germany
L'art et les Technologies Industrielles, Vitry-sur-Seine, France
- 1971 Arte Y Cibernetica, Universidad de Buenos Aires, Brazil
Arteonica, Universidade de São Paulo, Brazil
- 1970 Generacion Automatica De Formas Plasticas, Universidad de Madrid, Madrid, Spain
Computer Graphics 70, Brunel University, Uxbridge, UK
- 1969 Salon De Mai, Musée d'Art Moderne de Paris, France
Salon Realites Nouvelles, Musée d'Art Moderne de Paris, France
- 1967 Concordancia De Arte, Galeria Juana Mordo, Madrid, Spain
- 1966 Divergenzen 66, Galerie Lauter, Mannheim, Germany
- 1965 Blanc Et Noir, Galerie Paul Facchetti, Paris, France