Multiplied:

EDITION MAT

and the Transformable Work of Art, 1959–1965

February 7–April 19, 2020

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A Note to Teachers

Multiples became an international phenomenon in the art world of the 1960s. Artists who questioned the status of art as a luxury commodity embraced multiples—three-dimensional objects issued in affordable editions—as a more accessible art form. This exhibition explores the pioneering role played by Edition MAT (multiplication d'art transformable), the first series of multiples to be produced and broadly distributed in the post–World War II era. The Romanian-born Swiss artist Daniel Spoerri (b. 1930) established Edition MAT in Paris in 1959. He solicited artworks from a range of artists that he then marketed and sold through exhibitions across Europe. His aim was to expand and democratize the role of art by producing small-scale, reasonably priced multiples. These works emphasized movement and viewer participation, signaling a less hierarchical relationship between the audience and the work of art than traditional types of art such as painting or sculpture.

Multiplied: Edition MAT and the Transformable Work of Art, 1959–1965 brings together more than one hundred works by an international and cross-generational network of artists, many of whom were exploring experimental theater, music, and poetry, and who participated in scientific and philosophical inquiry. In addition to presenting for the first time in the United States the entirety of all three collections of Edition MAT, produced between 1959 and 1965, the exhibition offers ample cross-disciplinary connections between Visual Arts, English Language Arts, Music, Theater, Science, Mathematics, and Social Studies.

This guide is designed as a resource for educators bringing students to visit the exhibition or who wish to bring the artworks, themes, and ideas of Edition MAT into the classroom. At the beginning of the guide a pre-visit lesson plan introduces the interpretation of works of art. Each thematic section of the guide that follows includes contextual information, discussion prompts, and extension activities that can be adapted for use in the classroom or during a museum visit. For access to downloadable images and video for use with this guide, please contact Olivia Mendelson at mendelson.olivia@wustl.edu. Please note that the images and video may be used for educational purposes only and are not licensed for commercial applications of any kind. While the Museum is closed, the education department is offering guided virtual tours to support distance learning and arts integration. For more information on scheduling a virtual tour, please email mendelson.olivia@wustl.edu.

Multiplied Art

Grades
4–12

Duration
45 minutes

Essential Question
How does movement transform the way we experience the world?

Learning Outcomes
Students will be able to…

Use visual literacy skills to express and support their own interpretations of artworks while considering other people's perspectives.

Define multiples and define kinetic art.

Understand Daniel Spoerri's concept of multiplied artworks and describe how movement allows an artwork to continuously transform, taking on multiple forms.

Materials
Video (*Kinetische Objekte* [Kinetic objects], 1960, dir. Ulrich Wiedmann), index cards (one per student), pencils or pens (one per student), paper

About the Artworks

Multiples are three-dimensional art objects issued in affordable editions. In 1959 the Romanian-born Swiss artist Daniel Spoerri invited artists to send him objects that could be produced in editions of one hundred, whose cost of production would be no more than roughly $10 each, and that could be easily transported and assembled from instructions. He then exhibited the works in Paris at the Galerie Edouard Loeb.[1] This exhibition marked the beginning of Edition MAT (multiplication d'art transformable), which brought together an international, cross-generational network of artists reflecting the variety of experimental practices in the postwar period, including kinetic and Op art, as well as Nouveau Réalisme, Nouvelle Tendance, Fluxus, Pop art, and Zero. The objects emphasized kineticism, or movement through sensory experiences that explored the process of perception.

Movement, changeability, and audience interaction with kinetic multiples are central to the concept of multiplied art. Whether it be through a motor, physical touch, or optical illusion, movement allowed each artwork within an edition to undergo continual transformation. Not only are the works of art in Edition MAT multiplied in the sense that they were produced in editions, but they also take on multiple forms and generate multiple experiences for viewers.

Introduction to Artworks (20 minutes)

Play a segment of the *Kinetische Objekte* video from 01:30 to 02:45. (Note: It is not necessary to enable audio on the video.) Ask students to watch the video. Next, pass out index cards and play the video again, asking students to jot down words that come to mind.

Then ask students to place their index cards on a board, wall, or floor. Read the words out loud, highlighting similarities and differences in the group's responses. Ask students to share why they selected their words, encouraging them to specify what they saw in the video that shaped their response.

These objects are examples of kinetic art, meaning art that moves or is moved. What kinds of movements can be seen? What caused the artworks to move? Do the artworks seem to change over time? If so, how?

Activity (25 minutes)

The Swiss artist Jean Tinguely used motors to explore the possibilities of movement. For Edition MAT he contributed artworks made of a small motor attached to a metal base. Viewers were invited to attach different objects to the clamp connected to the motor's axle. The objects rotate at high speed when the motor is turned on.

Ask students to take out a sheet of paper and a pencil. Explain that they are going to watch one of Tinguely's motorized multiples in action, and their challenge is to make a quick sketch of the artwork while it is moving.

Play the segment of the video from 05:15 to 05:45 that shows the spinning box of lit matches. Students will make quick sketches while the video is playing.

Ask students to share and discuss their sketches with the class:

> Was it challenging to make a sketch of this artwork? Why or why not?

> How similar or different are our sketches?

> What different techniques did you use to try to capture a moving, three-dimensional artwork in an unmoving, two-dimensional drawing?

Daniel Spoerri, the founder of Edition MAT, championed kinetic art because it had the potential to redefine art by activating the relationship between the viewer and the artwork. These objects are un-fixed, always becoming new and different. He called this phenomenon "multiplication." A single object, once set into motion by motors, touch, or the viewer's changing position, transforms into endless new forms.

Ask students to consider:

> What ideas do you have for creating works of art that can be activated by motion? What different forms would your artwork take?

> Can you think of another time when movement, either your own or that of another person or object, changed the way you saw or experienced some aspect of the world? (Note to teachers: be ready to share an example or two to help students connect this activity to other contexts).

Gallery Guide

Missouri Grade Level Expectations by Content Area

Visual Art	VA:Cr.2A, VA.Re7A, VA:Re7B, VA:Re9A, VA.Cn11A	**Social Studies**	9–12.WH.5.PC.C
Theater	TH:Pr4A, TH:Pr6A	**Science**	PS1.A.1, PS2.A.1, PS3.B.1, LS1.A.1
English Language Arts	**Grades 4–5:** R.1.B, W.2.C, SL.1.A, SL.3.A, SL.4.A **Grades 6–12:** W.2.A, SL.1.A, SL.1.B, SL.1.C, SL.2.C	**Mathematics**	RP.A.1, RP.A.2, EEI.C.9, F.A.1, F.A.2, F.B.4, F.B.5

Learning Outcomes
Students will be able to…

Identify how artists use different forms of movement to create different artistic effects and new, interactive relationships with viewers.

Understand how multiples responded to postwar consumer culture and the art market of the 1950s and 1960s.

Use visual literacy skills to express and support their own interpretations of artworks while considering other people's perspectives.

Experiment with different methods of individual and collaborative creation.

Teaching with Works of Art
Throughout this guide you will encounter the Look, Describe, Analyze, Relate framework for engaging students in interpretive conversations about works of art. This process asks students to drive the interpretation of artworks by moving from close looking to using their visual observations, life experiences, and general knowledge to support analysis.

LOOK

Students spend one minute looking at the artwork before sharing comments.

DESCRIBE

Students describe what they see and discuss observations.

ANALYZE

Students offer interpretive comments based on their observations, and the facilitator helps to connect the interpretations of the group while adding contextual information.

RELATE

Students relate their observations and interpretations to something in their lives or something they are learning about in class.

Movement + Transformation

As soon as an image starts changing, whether due to actual or merely apparent motion, it enters an ongoing state of transformation, making it endlessly new and different.

—Daniel Spoerri[2]

The focus of the first series of Edition MAT in 1959 was objects that could be transformed in one of three ways: visually, through a change in the viewer's position; manually, through the spectator's direct intervention; or mechanically, through the use of a motor. The Swiss artist Jean Tinguely (1925–1991) introduced motors into his work in the early 1950s and undertook a lifelong exploration of movement. Tinguely participated in both the 1959 and 1964 collections of Edition MAT, contributing two closely related works: *Constante indéterminée* (Indeterminate constant; 1960) and *Constante* (Constant; 1964). Both are made with a small motor attached to a black metal base. On the motor's axle Tinguely placed a clamp to which the viewer could attach any object—a bent paper clip, a piece of cardboard, or colored ribbons, for instance. When the work is switched on the attached objects rotate at high speed and appear to blur and dissolve into the air.

Born in Venezuela, Jesús Rafael Soto (1923–2005) was part of an international cohort of artists working in Paris in the 1950s and 1960s who were deeply engaged in kinetic experimentation. Soto wished to "dynamize" abstract painting, or to give it a greater sense of motion.[3] One way he did this was by making Plexiglas works with overlaid white and black spirals. As the viewer moves in front of these objects, the two spiral patterns overlap, creating an optical illusion of movement known as the moiré effect. For his submission to the 1965 collection of Edition MAT, Soto suspended a nylon thread vertically in front of a pattern of thin vertical black-and-white stripes. As the viewer moves in front of the work, the ensemble produces a flickering effect; the thread appears to disappear and merge with the background.

While the kinetic artworks in Edition MAT achieve different kinds of motion through a variety of means, their makers shared an interest in how movement could transform objects. Tinguely's fast-spinning clamps produce mechanical movement through motors, and Soto's constructions of lines and spirals produce optical vibrations through the viewer's shifting position. Both artists used movement to create the effect of dematerialization—of making a solid form appear to disappear or transform into something else.

Jean Tinguely, *Constante* (Constant), 1964, Painted sheet iron and metal clamp with electric motor, 13 ¾ × 8 ¼ × 9 7/8 in. (35 × 21 × 25 cm). Published by Edition MAT / Galerie Der Spiegel, Cologne. Collection Museum Haus Konstruktiv, Zürich. © 2020 Artists Rights Society (ARS), New York / ADAGP, Paris.

Jesús Rafael Soto, *Ohne titel* (Untitled) or *Piège de lumière* (Light trap), 1965, Nylon thread and screen-printed paper on wood, 18 ½ × 11 7/16 × 5 5/16 in. (47 × 29 × 13.5 cm). Published by Edition MAT / Galerie Der Spiegel, Cologne. Kern Collection, Großmaischeid, Germany. © 2020 Artists rights Society (ARS), New York / ADAGP, Paris.

Look at Jean Tinguely, *Constante* (Constant), 1964. What do you notice?

How does this object create movement?

This artwork is called *Constante* (Constant), which can mean something that occurs continuously or something that does not change. What do you think is "constant" about this work? What seems to change and what stays the same?

Tinguely invited viewers to clip different objects into the clamp and turn on the motor to see them spinning. Someone even attached a lit box of matches! What would you choose to place in the clamp? What do you think it would look like while spinning?

Look at Jesús Rafael Soto, *Ohne titel* (Untitled) / *Piège de lumière* (Light trap), 1965. What do you notice?

How does this artwork and the one by Tinguely invite us as viewers to participate in the creation of movement? What kind of motion is created?

Soto was interested in the phenomenon of dematerialization, of making something solid appear to transform or disappear. At one point he described his artworks as attempts "to take a solid material and make it become ethereal."[4] Do you think Tinguely's *Constante* does this, or does something else?

Soto's and Tinguely's works make solid matter *appear* to change form. Can you think of other situations in which matter changes states? What causes the changes of states in those situations?

Mobiles

Italian artist Bruno Munari (1907–1998) was renowned for his transformable artworks. His *Macchina inutile* (Useless machine; 1945/1977) is a mobile that moves in a slow, undirected motion caused by slight changes in airflow. The title of the mobile reflects Munari's skepticism toward technology. According to the artist, mobiles "do not make anything, they do not eliminate labor, they do not save time and money, and they do not produce any commodities. They are nothing but colorful, mobile objects, specially designed to create a specific variety of combinations, movements, shapes, and colors."[5]

Show students Munari's *Macchina inutile* and discuss what material and environmental factors affect its movement. Next, have students create their own mobiles and examine how they operate and move in space. Experiment with changing environmental factors by opening a window or turning on a fan. Read Munari's above statement about his "useless machines." Do mobiles have a use, and if so, what is it? What other kinds of "useless machines" might one create?

MAT MOT

MAT MOT, a literary counterpart to Edition MAT (*mot* is French for "word"), comprised a series of interactive language objects housed in identical boxes. The American artist George Brecht (1926–2008) contributed *The Universal Machine* (1965) to MAT MOT. In this work the box is lined with a sheet of paper printed with all sorts of images, from light bulbs to dinosaur bones. Atop the collage sit a variety of small objects. The work is designed to be shaken so that the un-fixed objects move and randomly align with or cover up the printed images. Brecht's instructions explain how interpreting the objects in relation to the images can act as a prompt to spur creativity.

For this activity students can work in small groups to collage the interiors of shoeboxes with images and words and then fill them with some small everyday objects. Have students shake their boxes to move the objects around, and then use the arrangement of objects and images as a prompt for writing a poem or story.

Perspective + Perception

Changing our viewpoint also changes the position of the construction. It seems to tilt, to turn, to recede, to advance as a whole and in parts . . . The point is: the object does not move; it moves us.

—Josef Albers[6]

Not only are the objects in Edition MAT transformable, but their potential for change and diversity of forms also suggest a multiplicity of possible viewpoints. Daniel Spoerri believed that the cumulative works of Edition MAT could "demonstrate the relative and mutable nature of our own existence."[7] By making artworks that change over time, the participating artists asked spectators to understand their perspectives as being as conditional, partial, and mutable as the artworks on view.

Throughout his long career, the German-born American artist Josef Albers (1888–1976) used geometric abstraction to study the changeable nature of forms and colors. Both an artist and a teacher of art, he emphasized students' independent thinking and capacity to see more acutely through the study of fundamentals of design, drawing, and color. Albers's approaches to teaching and to art-making were both aimed at altering routine habits of seeing. He declared, "I want to open eyes."[8] Albers contributed one of his *Strukturale Konstellation* (Structural constellation) works, which he termed "impossible objects," to the 1959 collection of Edition MAT. This two-dimensional image depicts a three-dimensional figure that could never exist in real space. The arrangement of thicker and thinner white lines on a black background seems to produce shapes that alternately protrude and recede as one continues to look, exemplifying Albers's interest in "perceptual ambiguity," in which what one sees depends on the perspective of the viewer.[9]

Josef Albers, *Strukturale Konstellation S V–3* (Structural constellation S V–3), 1959. Engraved plastic on painted wood, 4/100, 15 3/8 × 15 3/8 × 2 ¾ in. (39 x 39 x 7 cm). Published by Edition MAT, Paris. Kunstmuseen Krefeld, Germany. © The Josef and Anni Albers Foundation / Artists Rights Society (ARS), New York. Photo © Kunstmuseen Krefeld–Volker Döhne–ARTOTHEK.

Frank J. Malina, *Tableau Mobile—Hercules* (Mobile picture—Hercules), 1960. Lumidyne system: mirror, painted Plexiglas, light sources, and electric motor in painted wood box, 3/100, 11 × 11 × 4 1/8 in. (28 × 28 × 10.5 cm). Published by Edition MAT, Paris. Kunstmuseen Krefeld, Germany. Photo © Kunstmuseen Krefeld–Volker Döhne–ARTOTHEK.

Frank J. Malina (1912–1981) had a successful career as an aeronautical engineer—
he developed the first high-altitude rocket for the United States and cofounded NASA's
Jet Propulsion Laboratory—before becoming disenchanted with the weaponization of
technologies during World War II. He moved to Paris in the late 1940s, and by 1953 he was
working full time as an artist. He was interested in how scientific advancement made
it possible for humans to be aware of previously unseen phenomena in the universe. The
artist's duty, according to Malina, was to "help his fellow man to live in greater joy in
the world of his time," by capitalizing on the new perceptual capacities opened up by the
advances of the space age.[10]

Malina was an innovator in the use of light in kinetic art. In 1958 he patented his Lumidynes,
rectangular boxes faced on a single side with painted Plexiglas and containing a motor.
When set in motion and illuminated, light projects through certain portions of the Plexiglas
face, resulting in a composition of continuously changing forms and colors. Malina con-
tributed *Tableau Mobile—Hercules* (Mobile picture —Hercules; 1960), one of his Lumidynes,
to Edition MAT. Throughout his career as an artist Malina remained a passionate advocate
for the necessity of collaboration between art and science.

Look at Josef Albers, *Strukturale Konstellation S V–3* (Structural constellation S V–3), 1959. What do you notice?

Where do the forms seem to project, and where do they seem to recede? Which lines look like they are in front and which in back?

Do you think you could build this shape in three dimensions?

Josef Albers believed that the way something appears to us is dependent on the context in which we view it, and he made ambiguous images like this one to show how something can look different when considered from different physical orientations. Is there benefit to understanding something from multiple perspectives? Can you think of a time in which the position from which you viewed something changed how it looked?

Look at Frank J. Malina, *Tableau Mobile—Hercules* (Mobile picture—Hercules), 1960. What do you notice?

How do you think Malina made this artwork?

What mood do the slowly shifting colors evoke?

Before Malina began working as an artist he had a career as an aeronautical engineer building rockets for NASA. He wanted to use art to show people the beauty in the universe that we might not otherwise see or notice but that he had become aware of through his career in science. What part of the natural world or the universe does this artwork bring to mind?

Malina named this work after the stellar constellation Hercules. Why do you think Malina chose this title for this artwork? Can you think of another title that you might give this work?

The title of Albers's picture also includes the word "constellation." What are different meanings of "constellation"? In what ways do these artworks bring to mind constellations? What are some further similarities or differences between these two artworks?

What are some ways that you think science can contribute to art and art can contribute to science?

Students can create pictures that shift their perspective on everyday objects. Provide students with an assortment of leaves, twigs, bark, and pebbles, or bring students outside to gather their own natural materials. Instruct students in how to use a microscope and let them investigate what different materials look like at the cellular level. Ask students to choose a view through the microscope and sketch what they see with pencil on paper. Provide colored pencils, crayons, markers, oil pastels, or watercolor paints for students to add color to their pictures. Have students share their artworks with the class and reflect on the process of creation. How does viewing an object up close change our understanding of it?

Authorship + Originality

How could one produce the greatest possible originality at the lowest price? The answer is as follows:—think of the work of art from a social aspect—produce originals in series.

—Karl Gerstner[11]

The participatory nature of many of the artworks in Edition MAT, the importance of movement in these works, and the format of the multiple challenged traditional notions of artistic authorship and originality. While an artist supplied the idea for a given work, the actual production of the multiple was outsourced to someone other than the artist, as Spoerri believed that the artist's idea was more important than the artist's hand. In many cases, audiences were encouraged to take an active role in shaping the appearance of a given artwork.

Spoerri revived Edition MAT in 1964 in partnership with Swiss artist and graphic designer Karl Gerstner and the Galerie Der Spiegel in Cologne. At this time the focus of Edition MAT shifted to the idea of "originals in series," or variations on a theme. Each multiple in an edition was now different from the others because of endless variations in design made possible by a number of changing variables.

Niki de Saint Phalle (1930–2002) was a member of the Paris-based Nouveaux Réalistes, a group of artists co-founded by Spoerri in 1960. For the 1964 collection of Edition MAT, Saint Phalle created *Shoot-it-yourself-picture*. Each multiple consisted of an arrangement of bags of colored paint attached to a board and covered in white plaster. She provided instructions indicating that the object should be shot at with a rifle: "Shoot until all the pouches have been 'bled' (or until you like the picture)," she explained.[12] The works differed from one another in the arrangement of their paint capsules, yet the major variations in the "finished" works resulted from the process of shooting. Different people using different distances and angles, combined with the chance effects of the dripping paint, produced different outcomes for each work.

Niki de Saint Phalle, *Shoot-it-yourself-picture*, 1964. Plaster, paint, and plastic on wood, 47/100, 28 3/4 × 21 1/4 × 2 3/4 in. (72 × 54 × 7 cm). Published by Edition MAT / Galerie Der Spiegel, Cologne. Kern Collection, Großmaischeid, Germany. © 2019 Niki Charitable Art Foundation. All rights reserved / ARS, NY / ADAGP, Paris.

Enrico Baj, *General* or *Personaggio deccorato* (Decorated figure), 1965. Felt, trimmings, and metal appliqués on mattress fabric, 15/100, 18 1/2 × 22 × 1 3/4 in. (47 × 56 × 4.5 cm). Published by Edition MAT / Galerie Der Spiegel, Cologne. Ludwig Museum Koblenz, Germany.

The question of authorship became contentious in the case of the Italian artist Enrico Baj (1924–2003), pointing to the sense of uncertainty surrounding the new artistic format of the multiple. For the 1965 collection of Edition MAT Baj contributed collages depicting buffoonish military figures crafted using medals, ribbons, and other decorations. Baj's dealer Arturo Schwarz wanted to handle the sale of the artist's multiple himself. Schwarz feared that selling Baj's works in Edition MAT at a much lower price than his unique paintings would impact his overall prices on the art market.[13] Spoerri agreed to specify on the labels attached to the back of each work that Baj's contribution was manufactured under license by Daniel Spoerri to make it clear that these works were not made by Baj himself but by Spoerri following his instructions. This turn of events separated Baj's contribution from the notion of the "series of originals" because it gave greater value to those unique works made by Baj's own hand.

Saint Phalle and Baj took different stances on the connected issues of authorship and originality with their respective contributions to Edition MAT. While Saint Phalle gave audiences and buyers the directive to "shoot-it-yourself," involving them as cocreators of the work, Baj wished to clearly delineate between the multiples produced by Spoerri and his own singular creations.

Look at Niki de Saint Phalle, *Shoot-it-yourself-picture*, 1964. What do you notice?

How do you think these paintings were made?

What emotions do you think they convey?

These artworks are called "shoot-it-yourself-pictures." Niki de Saint Phalle covered bags of paint in white plaster, and then instructed the purchasers of her pictures to use guns to shoot at them, exploding the paint bags and creating different designs of spatters and drips. Do you think that the people who shot these paintings should also be considered artists, or performers, or collaborators?

Saint Phalle related her shooting paintings to the human body. She wrote, "I imagined the painting beginning to bleed. Wounded, in the way that people can be wounded. For me, the painting became a person with feelings and sensations."[14] Does hearing this change your impression of these pictures, or your interpretation of what these pictures convey?

Look at Enrico Baj, *General* or *Personaggio deccorato* (Decorated figure), 1965. What do you notice?

What do these pictures look like to you?

What do you think these pictures are made of?

These multiples are from Baj's series called *Generals.* They are meant as abstract depictions of military figures and powerful people. Baj used materials associated with authority— medals, ribbons, and other decorations from military uniforms. Looking at these images, do they look authoritative and powerful to you? Why or why not?

Initially all of the multiples in Edition MAT were sold for the same price and there was no distinction between a work made by an artist and a work fabricated by someone other than that artist from a set of instructions. Baj, however, only agreed to contribute these works to Edition MAT if it would be clear to buyers that these works were not "originals" created by Baj, but multiples fabricated by someone else. What would it be like to have someone else produce your idea for an artwork?

In 1960 Spoerri planned an evening at the Institute of Contemporary Arts in London titled *Three Ways of Being Creative* that was designed to prompt audience participation. For this activity, have students carry out one of Spoerri's creative projects from that night, for which his main goal was to show that "there are methods you can use to be creative without having anything more than a 'recipe' from the artist."[15]

Autotheater
Spoerri presented a version of his "autotheater" in which audience members were invited to write their own texts to be read aloud according to instructions. Give students a passage of text that can be performed as a monologue. Have each student write an instruction slip for their text to determine how it should be performed, such as reading the text backwards, whispering it, or performing it while lying on the ground. Have students exchange texts and instruction slips and then perform them for the class. Reflect on the experience of writing instructions and watching them be performed by someone else, and the experience of receiving instructions and performing them.

Lackskins
Visitors to *Three Ways of Being Creative* could also produce their own abstract paintings using the Swiss artist André Thomkins's (1930–1985) procedure for his *Lackskins*, in which paint is dripped into a bowl of water and then manipulated with sticks or by blowing before applying a piece of paper to the surface to fix the pattern. Provide students with bowls of water, paints, toothpicks, and pieces of paper cut to fit within the circumference of the bowls. After students have experimented with Thomkins's procedure, have them share their compositions and reflect on this artistic technique.

Materials + Process

But what does MAT actually mean? The name is a play on material, matter, mater *and is an acronym for Multiplication d'art transformable.*[16]

Several of the artists who participated in Edition MAT were associated with Nouveau Réalisme (New Realism), including Spoerri himself. They were especially interested in the "new realities" of a postwar society defined by an increase in mass-produced consumer goods in the United States and Western Europe during the economic boom that followed the end of World War II. Spoerri and his colleagues questioned consumerism but at the same time participated in its systems by marketing their multiples as relatively affordable art objects for private collectors. Many of the multiples in Edition MAT are made of every-day materials, including commodity objects and debris and other scraps of modern industrial culture. Some of the artists who contributed to Edition MAT also responded to the processes of production, consumption, and destruction inherent in postwar consumer culture through their own artistic processes.

The French-born artist Arman (1928–2005) was part of Nouveau Réalisme. He gained renown for his series of junk assemblages and his practices of accumulation and repetition that linked his work to the growth of mass production and consumerism. Arman related his artistic process to the processes of postwar consumer culture: "As a witness of my society, I have always been very much involved in the pseudo-biological cycle of production, consumption, and destruction."[17] Arman contributed *Poubelles* (Trash cans), accumulations of found trash and debris placed in clear Plexiglass vitrines, to the 1964 collection of Edition MAT. Arman's *Poubelles* epitomize the shift in focus within the 1964 collection from an emphasis on transformation and movement to one on variations on a theme, as the content of the cases changed with each iteration of his multiple.

Arman, *Poubelle* (Trash can), 1964. Trash in Plexiglas box on painted wood, 68/100, 28 1/8 × 20 1/4 × 4 5⁄8 in. (71.4 × 51.5 × 11.7 cm). Published by Edition MAT / Galerie Der Spiegel, Cologne. Ludwig Museum Koblenz, Germany. © 2019 Artists Rights Society (ARS), New York / ADAGP, Paris.

Christo, *Look*, 1965. Magazine wrapped in plastic and cord on painted wood, 22 1⁄16 × 18 1/8 × 1 9⁄16 in. (56 × 46 × 4 cm). Published by Edition MAT / Galerie Der Spiegel. Kern Collection, Großmaischeid, Germany. © Christo.

The signature style of the Bulgarian-born artist Christo (b. 1935) involves wrapping every-day objects in plastic and other materials––from bottles, canned goods, and tables to entire buildings. For *Look* (1965), his contribution to the 1965 collection of Edition MAT, Christo chose different issues of the biweekly American magazine *Look* and wrapped them in plastic and tied them with cord. His minimal modification of these readymades—ordinary, mass-produced objects removed from their original context or functionality and presented as artworks—called into question the identification of his multiples as works of art. When Christo shipped his wrapped magazines from New York to be exhibited in Cologne, the customs agents unwrapped two or three of the multiples, as they did not recognize them as works of art. Christo initially intended for his multiples to be displayed on a flat surface, but Gerstner suggested framing them so that they could be mounted on the wall. The addition of the frame would also prompt customs agents to more easily understand the works as pictures.

Look at Arman, *Poubelle* (Trash can), 1964. What do you notice?

What is this artwork made of? How do the materials and the way the artist used the materials differ from traditional painting or sculpture?

Arman's *Poubelles* were constructed in a workshop run by Galerie Der Spiegel in Cologne, rather than by the artist himself. Arman had wanted the *Poubelles* to contain trash from the bins at Galerie Der Spiegel, but the gallery instead filled many of them with colored scraps from books. After he saw the completed works, Arman corrected the edition by replacing the contents with refuse from a trash can located at the Galerie Der Spiegel. Why do you think it was important to Arman that the works be made of actual garbage from the place in which they were created and displayed? Do you think this substitution changes the possible messages of the work?

If you made an artwork similar to Arman's *Poubelles* by collecting trash from your home, school, or another place in your community, what might it show about the time and place in which you live?

Look at Christo, *Look*, 1965. What do you notice?

What kinds of images and messages do you see on the covers of these magazines?

The title of these multiples, and of the magazine, is *Look*. What do you think Christo wants us to look at, or to draw our attention to?

How is variation achieved in this static work versus in other kinetic works in Edition MAT?

How do the images and messages on the covers of these magazines compare to magazine covers you see today? Do you think the images and messages we see in mass media tell us about contemporary culture?

Christo initially intended for his multiples to be displayed without a frame on a flat surface, like a table. If these works were displayed in this way, do you think you would look at them differently?

Arman and Christo both put objects that we do not usually consider to be art—scraps of trash and magazines— up for sale in a gallery. Who and what do you think can or should determine what is art?

Students can make e-waste art—art made of recycled electronics—emulating the process of deconstruction and reconstruction used by the Swedish artist Bo Ek (1924–2006) to create his *Kugelspiel* (Ball game) for the 1959 collection of Edition MAT. *Kugelspiel* is a sculpture made from a deconstructed alarm clock that produces chance motion through the winding of its springs and cogs. Ask students to gather electronics that are no longer in use and then deconstruct them with pliers and screwdrivers. Use the component parts to create three-dimensional sculptures or two-dimensional mosaics. Have students share their works with the class and reflect on the creative processes of deconstruction and reconstruction. What are other ways that we can reuse objects that we would otherwise throw away, or ways that we can reduce the waste that we produce? What do these works say about our contemporary culture and the relationship between art and everyday life?

Notes

1 All information, unless otherwise noted, is from Meredith Malone, ed., *Multiplied: Edition MAT and the Transformable Work of Art, 1959–1965* (St. Louis: Mildred Lane Kemper Art Museum; Munich: Hirmer, 2020).

2 Daniel Spoerri, "The Multiplied Work of Art" (1960), translated in Malone, *Multiplied*, 217.

3 See Claude-Louis Renard, "Excerpts from an Interview with Soto," in *Soto: A Retrospective Exhibition* (New York: Solomon R. Guggenheim Museum, 1974), 14.

4 Jesús Rafael Soto, in Carlos Diaz Sosa,"La gran pintura es cosa de progreso histórico" (interview), *El Nacional* (Caracas), August 1, 1966, quoted in Arnauld Pierre, "L'immatériel de Soto et la peinture du continuum," in *Jesús Rafael Soto* (Paris: Galerie Nationale du Jeu de Paume, 1997), 24.

5 Bruno Munari, "Che cosa sono le macchine inutile e perchè", *La Lettura* 37, no. 7 (1937), reprinted and translated in Miroslava Hájek and Luca Zaffarano, eds., *Bruno Munari: My Futurist Past* (Milan: Silvana, 2012), 202.

6 Josef Albers, artist's statement, in *Kinetische Kunst: Alexander Calder, Mobiles und Stabiles aus den letzten Jahren / Edition MAT, Paris; Kunstwerke, die sich bewegen oder bewegen lassen* (Zurich: Kunstgewerbemuseum, 1960), unpaged.

7 Daniel Spoerri to Paul Wember, undated (c. May 1960), Daniel Spoerri Archives, Swiss National Library, Bern, quoted in Malone, *Multiplied*, 21.

8 On his arrival from Germany in 1933, Albers gave this statement in response to a question regarding what he hoped to accomplish in the United States. Quoted in Eva Diaz, "The Ethics of Perception: Josef Albers in the United States," *Art Bulletin* 90, no. 2 (June 2008): 260.

9 Josef Albers, *Search versus Re-Search* (Hartford, CT: Trinity College Press, 1969), 21.

10 Frank J. Malina, "Some Reflections on the Difference between Science and Art," in *DATA: Directions in Art Theory and Aesthetics, An Anthology*, ed. Anthony Hill (London: Faber, 1968), 137.

11 "What Should Art Cost?" (1965), originally published in *3 to Infinity: New Multiple Art* (London: Whitechapel Art Gallery and Arts Council of Great Britain, 1970), 5–9, excerpted in Malone, *Multiplied*, 223.

12 Niki de Saint Phalle to Karl Gerstner, summer 1964, quoted in Gerstner, "What Should Art Cost?" (1965), in *3 to Infinity*, 8.

13 Katerina Vatsella, *Edition MAT: Die Entstehung einer Kunstform; Daniel Spoerri, Karl Gerstner und das Multiple* (Bremen: Hauschild, 1998), 98.

14 Niki de Saint Phalle to Pontus Hulten, undated, in Pontus Hulten, *Niki de Saint Phalle* (Paris: Les Amis du Musée d'Art Moderne de la Ville de Paris, Paris Musées, 1992), 160.

15 Daniel Spoerri to André Thomkins, 1960, Spoerri Archives, quoted in Malone, *Multiplied*, 29.

16 Press release issued on the occasion of the exhibition of Edition MAT, Collection 1964, Galerie Der Spiegel, Cologne, 1964, translated in Malone, *Multiplied*, 219.

17 Arman, in Henry Martin, *Arman, or Four and Twenty Blackbirds Baked in a Pie, or Why Settle for Less When You Can Settle for More* (New York: Abrams, 1973), 56.

Resources

Malone, Meredith, ed. *Multiplied: Edition MAT and the Transformable Work of Art, 1959–1965*. St. Louis Mildred Lane Kemper Art Museum; Munich Hirmer, 2020.
Available on-site at the Museum Shop or online at the University of Chicago Press

Box folder containing video and high-resolution images:
Please email Olivia Mendelson at mendelson.olivia@wustl.edu for access

Key Terms

abstract art art that does not attempt to represent an accurate depiction of a visual reality but instead use shapes, colors, forms, and textures to achieve its effect

authorship the state or fact of being the writer of a document or the creator of a work of art

consumerism the preoccupation of society with the production and use of often disposable goods

dematerialization making a solid form appear to disappear or change shape

Fluxus a loose international network of artists that emerged in the early 1960s, whose members shared an interest in collapsing the boundaries between language, music, performance, and the visual arts

found object a natural or human-made object, or fragment of an object, that is found (or sometimes bought) by an artist for use in creating artworks

kinetic art art that can move or be moved

moiré effect a visual perception of movement that occurs when viewing a set of lines or dots that is superimposed on another set of lines or dots, where the sets differ in relative size, angle, or spacing

mobile a type of sculpture that is formed of components that are suspended in the air and move in response to air currents or motor power

multiple three-dimensional art objects issued in editions

Nouveau Réalisme (New Realism) a group of artists loosely united by an interest in the "new realities" of a postwar society defined by an increase in mass-produced consumer goods in the United States and Western Europe during the economic boom that followed the end of World War II, cofounded by Daniel Spoerri in Paris in 1960

Nouvelle Tendance (New Tendency) an international network of kinetic artists founded in 1961 who rejected subjective expression in art in favor of a rational approach that often incorporated science and technology

Op art an abstract style, also known as Optical art; developed in the 1960s and based in theories of color and perception, Op art compositions often create optical illusions of vibration or depth using geometric shapes and lines in black and white or vivid colors

perception the organization, identification, and interpretation of sensory information in order to represent and understand the presented information, or the environment— not only the passive reception of sensory signals but also a physiological and psychological experience shaped by the recipient's learning, memory, expectation, and attention

Pop art an art movement, which emerged in the 1950s and flourished in the 1960s, that challenged traditions of fine art by including imagery from popular and mass culture, such as advertising, comic books, and mundane mass-produced cultural objects.

readymade ordinary, mass-produced objects removed from their original context or functionality and presented as artworks

Zero an artists' group founded in Düsseldorf, Germany by Heinz Mack and Otto Piene and later joined by a third member, Günther Uecker; the group's interests were focused on the exploration of experimental materials and the role of light and movement in art; active from 1957 to 1966