

Christien Meindertsma

Dutch, born 1980

Acoustic Fur 2018

Acoustic felt and textile remnants

Gift of the designer, 2019

Label Format
Platform

Markus Freitag

Swiss, born 1971

Daniel Freitag

Swiss, born 1972

Top Cat Bag (model F13)

1993

Used truck tarpaulins, seatbelts, and
innertubes

Manufacturer: Freitag, Zurich, Switzerland

Gift of Lars Müller, 2003

Exhibition Title
2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format
Platform

Label ID
773b3fb2

Last Updated
8/14/2023
7:56:17 PM

Updated By
Jackie Neudorf

Contains Objects
112.2003

nendo

Japan, est. 2002

Oki Sato

Canadian, born 1977

Cabbage Chair 2007

Pleated paper

Gift of the designer, 2008

In 2007, the fashion icon Issey Miyake challenged Sato to repurpose the paper left over from the fabric-pleating process used for his Pleats Please line of clothing. The Cabbage Chair was Sato's response: when he cut directly into a thick roll of cast-off paper and peeled back the layers, a chair blossomed from the cylinder. Its raw appearance contrasts with how comfortable it is, and its production and distribution costs (as the chair requires very little packaging) are minimal, even though the chair's uniqueness has propelled its price out of line with these wholesome traits.

The Living

United States, est. 2006

Mycelium Brick 2014

Molded mycelium and corn stalk

Gift of the architects, 2015

The Living's bricks are produced by combining mycelium (living root structures derived from mushrooms) with discarded corn stalks. In a process pioneered by the biomaterial company Ecovative, these base components are placed in molds where they bind to each other through fungal growth. When used as building blocks, the bricks create a structure that produces no waste and no carbon emissions. The bio-bricks were installed at an architectural scale in *Hy-Fi* at MoMA PS1 in 2014.

What is mycelium and how can it be used to build our surroundings? Enter the number on moma.org/audio or scan the QR code to listen on the free Bloomberg Connects app.



102

English Only

Jos van der Meulen

Dutch, born 1958

Paper Bags Waste Basket 1993

Billboards

Manufacturer: Goods, Amsterdam

Gift of the manufacturer, 1996

Exhibition Title
2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format
Platform

Label ID
61322b39

Last Updated
8/14/2023
9:06:02 PM

Updated By
Maya Ellerkmann

Contains Objects
433.1996.3

Studio Swine

United Kingdom, est. 2011

Alexander Groves

British, born 1983

Azusa Murakami

Japanese, born 1984

“Palm Stool” from Can City 2013

Sand-cast aluminum

Gift of Alice and Tom Tisch, Lisa Tananbaum,
and the Committee on Architecture and
Design Funds, 2019

Exhibition Title

2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format

Platform

Label ID

61322b31

Last Updated

8/14/2023

9:05:55 PM

Updated By

Maya Ellerkmann

Contains Objects

172.2019

Transnatural

Amsterdam, est. 2009

Marjan van Aubel

Dutch, born 1985

James Shaw

British, born 1987

Well Proven Stool 2014

Bioresin and cherry wood

Committee on Architecture and Design
Funds, 2014

Exhibition Title

2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format

Platform

Label ID

61322b35

Last Updated

8/14/2023

9:05:58 PM

Updated By

Maya Ellerkmann

Contains Objects

771.2014.1-2

Tord Boontje

Dutch, born 1968

Emma Woffenden

British, born 1962

Transglass Glassware

1997

Recycled glass

Gift of the designer, 2004

Exhibition Title

2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format

Regular

Label ID

61322a39

Last Updated

6/29/2023

8:12:39 PM

Updated By

Maya Ellerkmann

Contains Objects

495.2004.1-10

Exhibition Title

2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format

Regular

Label ID

61322acf

Last Updated

7/26/2023

3:08:32 PM

Updated By

Jaeyoon Lee

Contains Objects

745.2022

Hella Jongerius

Dutch, born 1963

Extended Jug 1997

Porcelain and polyurethane

Long Neck bottle 2000

Porcelain, glass, and plastic tape

Groove bottle 2000

Porcelain, glass, and plastic tape

Gifts of Jongeriuslab B.V., 2022

Suzanne Lee

British, born 1969

Amy Congdon

British, born 1986

Zoa. A new animal is born.

2017

Zoa biofabricated leather and cotton

Gift of the manufacturer, 2018

Updated By
CH2023.2006.1
Jackie Neudorf
Exhibition Title
2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format
Regular

Label ID
6c0917a6

Last Updated
6/2/2023
9:15:12 PM

Updated By
Jackie Neudorf

Contains Objects
85.2018

Adhi Nugraha

Indonesian, born 1965

Cow Dung Lamp 1 2021

Cow Dung Lamp 2 2021

Cow Dung Speakers 2021

Cow dung, PVA wood glue, and oil-based coating

Committee on Architecture and Design

Funds, 2023

Contains Objects
159.2019.1-10

Exhibition Title
2023 Life
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Materials of
Contemporary
Design

Label Format
Regular

Label ID
61322b21

Last Updated
6/23/2023
6:13:05 PM

Updated By
Jackie Neudorf

Kosuke Araki

Japanese, born 1988

Anima dinnerware set

2018-19

Charcoal of food waste and urushi lacquer

Gift of the designer, 2019

Exhibition Title
2023 Life
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Materials of
Contemporary
Design

Label Format
Regular

Label ID
61322a2b

Last Updated
6/2/2023
8:40:54 PM

Updated By
Jackie Neudorf

Atelier Luma / Luma Arles

est. 2016

Eric Klarenbeek

Dutch, born 1978

Maartje Dros

Dutch, born 1980

Studio Klarenbeek & Dros

The Netherlands, est. 2014

Algae Geographies 2019

Microalgae and sugar-based biopolymer

Gift of the designers, 2019

The conditions that threaten the existence of some marine species—elevated temperatures, acidification, altered salinity and rainfall, industrial emissions—also encourage the growth of certain types of algae. The Algae Lab at Atelier Luma in Arles, France, explores the use of this abundant by-product of environmental degradation in biomaterials that could replace petroleum-based plastics, through a process that also absorbs carbon dioxide. The team works with communities across the Mediterranean to source the algae in order to reactivate local economies and establish a network of resources, experience, and biological cultures.

Exhibition Title

2023 Life
Cycles: The
Materials of
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Design

Label Format

Regular

Label ID

61322a33

Last Updated

6/26/2023

5:21:42 PM

Updated By

Jackie Neudorf

Contains Objects

160.2019.1

Atelier Luma / Luma Arles

est. 2016

Eric Klarenbeek

Dutch, born 1978

Maartje Dros

Dutch, born 1980

Studio Klarenbeek & Dros

The Netherlands, est. 2014

Algae Geographies 2019

Microalgae and sugar-based biopolymer

Gift of the designers, 2019

The conditions that threaten the existence of some marine species—elevated temperatures, acidification, altered salinity and rainfall, industrial emissions—also encourage the growth of certain types of algae. The Algae Lab at Atelier Luma in Arles, France, explores the use of this abundant by-product of environmental degradation in biomaterials that could replace petroleum-based plastics, through a process that also absorbs carbon dioxide. The team works with communities across the Mediterranean to source the algae in order to reactivate local economies and establish a network of resources, experience, and biological cultures.

Neri Oxman

American, born Israel 1976

Mediated Matter Group

est. 2010

Massachusetts Institute of Technology

Cambridge, MA, est. 1861

Vespers: Lazarus 2016

3D-printed multicolored Vero acrylic polymer

Committee on Architecture and Design

Funds, 2018

Lazarus is an “air urn” designed to contain a dying person’s last breath. Its surface design is derived from the shape of airflow over an individual’s face, using data that can be either physically gathered or digitally generated. Lazarus is an example of the customized interfaces that may be in our future: wearable prosthetics and building coverings that respond to distinct material, chemical, and genetic makeups and varying environmental conditions.

Jibbe van Schie

Dutch, born 1998

Woven Translations 2023

3D-printed ceramics

Courtesy the designer

Inspired by how the textile industry creates patterns with stacked strands of thread, Van Schie developed a 3D-printing process for multicolored ceramics resembling woven baskets. Like contemporary mechanical looms, the printer works from an image whose pixels are translated into “stitches”; the software sorts and shuffles the stitches into a three-dimensional object. Van Schie designed and produced all the machine’s parts and assembled its electronics; he also programs the software and tests different clay formulations. With this comprehensive approach, he can adapt the process as mechanical issues arise and treat every error as new territory, often leading to further explorations.

Neri Oxman

American, born Israel 1976

Mediated Matter Group

est. 2010

Massachusetts Institute of Technology

Cambridge, MA, est. 1861

Glass I, section studies

2017–18

3D-printed glass

The Modern Women’s Fund, 2018

Discover how Neri Oxman has devised a new 3D-printing process that shapes glass while in its liquid state. Enter the number on moma.org/ audio or scan the QR code to listen on the free Bloomberg Connects app.



103

English Only

Caroline Slotte
Finnish, born 1975

Damaged Goods_Piece 1
2009

Damaged Goods_Piece 2
2012

Tracing_Piece 1 2015

Tracing_Piece 2 2015

Under Blue Skies 2015

Going Blank Again 2016

Reworked ceramics and plastic

Gift of Lise Stolt-Nielsen and the Committee
on Architecture and Design Funds, 2019

Exhibition Title
2023 Life
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Design

Label Format
Regular

Label ID
61322b2d

Last Updated
6/2/2023
9:08:11 PM

Updated By
Jackie Neudorf

Contains Objects
166.2019

Tomáš Gabzdil Libertiny
Slovak, born 1979

The Honeycomb Vase
“Made by Bees” 2006

Beeswax; digital video (color, silent; 0:53 min.)

Manufacturer: Studio Libertiny, Rotterdam,
the Netherlands

Gift of The Aaron and Betty Lee Stern
Foundation

Forty thousand honeybees were introduced into a vase-shaped scaffold where, layer by layer, they built a vase-shaped hive. Each vase from this series takes from two to ten days, depending on the weather, season, and size of the bee colony; this example took one week. The process, which the designer calls “slow prototyping,” ideally brings a natural phenomenon full circle: a vessel holds flowers that nourish the production of future objects, made by providing a safe habitat for the makers—the bees—in an environment of diminishing options. In reality, however, true understanding of what other species might want or gain from collaborating with humans remains remote.

Learn how this vase first began as a beehive. Enter the number on moma.org/audio or scan the QR code to listen on the free Bloomberg Connects app.



108

English Only

Paul Kirps

Luxembourger, born 1969

autoreverse 2004-05

Video (color, sound)

10:54 min.

Gift of the designer, 2008

Exhibition Title

2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format

Regular

Label ID

61322adb

Last Updated

6/2/2023
8:53:34 PM

Updated By

Jackie Neudorf

Contains Objects

1789.2008

Paul Kirps

Luxembourger, born 1969

**protekt, universal
protection set** 2002-03

Silkscreen

Gift of Paul Kirps, 2006

Exhibition Title

2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format

Regular

Label ID

61322ad7

Last Updated

6/2/2023
8:53:17 PM

Updated By

Jackie Neudorf

Contains Objects

120.2006.2

Rachel Wingfield

British, born 1978

Mathias Gmachl

Austrian, born 1974

Loop.pH

United Kingdom, est. 2003

Biowall 2006

Fiberglass

Gift of the Speyer Family Foundation, 2008

Exhibition Title
2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format
Regular

Label ID
61322b5c

Last Updated
7/26/2023
3:12:04 PM

Updated By
Jaeyoon Lee

Contains Objects
463.2008.a-b

Mae-ling Lokko

Ghanaian / Filipino, born 1987

Tom Roland

American, born 1991

Haorong Lee

Singaporean, born 1996

Handprints 2023

Mycelium, kenaf, jute, rain-fed cotton sliver,
and wool

Courtesy of Mae-ling Lokko, Yale Center for
Ecosystems in Architecture

Exhibition Title
2023 Life
Cycles: The
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Design

Label Format
Regular

Label ID
6c0943b7

Last Updated
7/26/2023
3:12:29 PM

Updated By
Jaeyoon Lee

Revital Cohen

British, born 1981

Tuur van Balen

Belgian, born 1981

Forever's 2017

Artificial diamond and gold

Committee on Architecture and Design
Funds, 2018

The diamond in the Forever's ring (whose name evokes the classic De Beers slogan “A diamond is forever”) was produced by incinerating a Congolese elephant tusk—part of a Belgian family heirloom—and compressing the carbon remains. The worth of both materials is tied to their scarcity: in the case of the tusk, due to regulations, environmental exhaustion, and ethics; in the case of the diamond, due to deliberate market manipulation. The ring symbolically links the two materials and, with its setting resembling an ouroboros (a self-devouring snake), embodies the vexed relationship between material value and the irrational dynamics of consumerism.

Hear from the designers about this unique diamond made from the ashes of an elephant tusk. Enter the number on moma.org/audio or scan the QR code to listen on the free Bloomberg Connects app.



105

English Only

Exhibition Title
2023 Life
Cycles: The
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Design

Label Format
Regular

Label ID
61322a43

Last Updated
7/26/2023
3:07:28 PM

Updated By
Jaeyoon Lee

Contains Objects
81.2018

Benjamin Aranda

American, born 1973

Chris Lasch

American, born 1972

Aranda/Lasch

United States, est. 2003

Terrol Dew Johnson

Tohono O’odham Nation, born 1973

Endless Knot 2006

Wood veneer, styrene, and sinew

Knot Basket 1 2006

Aluminum, branches, and sinew

Knot Basket 2 2006

Aluminum, bear grass, and sinew

Committee on Architecture and Design
Funds, 2015

Architects Aranda and Lasch, in collaboration with artist and activist Johnson, bring together advanced computational methods and traditional weaving techniques in these experimental constructions woven of sinew, branches, and metal. The designers explored the parallel processes of weaving and architecture—both social practices, both entailing repetition and changes in scale—and the continuum of digital and analog pattern making. The resulting works can be seen as three-dimensional investigations into the potential for relationships between crafts and experimental architecture and design.

Hill Jephson Robb

Scottish, born 1970

Cries and Whispers 2003

Wool

Gift of Hill Jephson Robb, 2006

After Robb’s younger sister died of cancer, leaving behind a seven-month-old daughter, the artist was moved to try to restore the feeling of security that the baby had experienced with her mother. He wetted and rolled felt into a womblike nest that provides a space of safety and comfort for infants and young children; its opening, like the entrance to a nest, can be enlarged as they grow. The process of making Cries and Whispers turned out to be cathartic, helping him grieve his loss.

Samuel Cabot Cochran

American, born 1982

Benjamin Wheeler Howes

American, born 1983

**SMIT Sustainably Minded Interactive
Technology, LLC**

United States, est. 2005

GROW 2005

Thin film photovoltaics, piezoelectric generators, screen-printed conductive ink encapsulated in ETFE fluoropolymer lamination, stainless steel, nylon, neoprene rubber, copper wire, and aluminum

Gift of Marie-Josée and Henry R. Kravis, 2008

GROW is a hybrid delivery device for wind and solar energy that uses flexible photovoltaic cells and piezoelectric generators to convert sunlight and movement into electricity. Its dynamic, organic form replicates climbing ivy; its flexible “leaves” catch sunshine to generate solar power, and their fluttering generates wind power. This device is lightweight enough to be easily mounted on vertical surfaces, such as building facades. The designers use recycled and reclaimed materials wherever possible to minimize GROW’s environmental footprint.

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2023 Life
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Label Format
Regular

Label ID
61322a3b

Last Updated
7/26/2023
3:07:06 PM

Updated By
Jaeyoon Lee

Contains Objects
433.2008

Fernando Laposse

Mexican, born 1988

Totomoxtle 2017

Heirloom corn, medium-density fiberboard,
and glue

Committee on Architecture and Design
Funds, 2023

Many of the corn breeds native to Mexico have been replaced by industrial hybrids, leaving the country's agriculture and culture impoverished, vulnerable not only to climate change but also to economic manipulation. To preserve native crops and dying artisanal traditions, Laposse devised a veneer made from the colorful husks of corn grown using traditional cultivation methods in Tonahuixtla, a village of Mixtec farmers in the state of Puebla. Totomoxtle ("corn husk" in Nahuatl) can be used in decorative products and surfaces, and the project has injected new life into the region's economy.

Hear how corn husks are helping preserve the farming practices of Mixtec people in the village of Tonahuixtla, Mexico. Enter the number on moma.org/audio or scan the code to listen on the free Bloomberg Connects app.



110

English Only

Exhibition Title
2023 Life
Cycles: The
Materials of
Contemporary
Design

Label Format
Regular

Label ID
61322adf

Last Updated
6/28/2023
8:12:17 PM

Updated By
Jackie Neudorf

Rachel Wingfield

British, born 1978

Mathias Gmachi

Austrian, born 1974

Loop.pH

United Kingdom, est. 2003

Biowall 2006

Fiberglass

Gift of the Speyer Family Foundation, 2008

Exhibition Title
2023 Life
Cycles: The
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Design

Label Format
Platform

Label ID
61322b5c

Last Updated
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7:20:32 PM

Updated By
Jaeyoon Lee

Contains Objects
463.2008.a-b