

Kosuke Araki

Japanese, born 1988

Anima 2018–19

Charcoal made from food waste and urushi

The Museum of Modern Art, New York.

Gift of the designer, 2019

Broken Nature

Object labels

Label Size:

Regular (100%)

Curatorial Asst.

Anna Burckhardt

ext. 8481

Color:

Lilac Hush

Awaiting final CMYK

11C 12M 10Y 0K

Mandy Barker

British, born 1964

**Beyond Drifting:
Imperfectly
Known Animals** 2016

Long-exposure photographs captured
on expired film and faulty camera

LEFT TO RIGHT, TOP TO BOTTOM:

***Ophelia medustica* (Pram wheel)**

Specimen collected from Glounthaune
shoreline, Ireland

***Phoronilasteri crae* (Tricycle wheel)**

Specimen collected from Whitepoint, Ireland

***Heplandista ica* (Electric plug and wire)**

Specimen collected from Carrigaloe Estuary,
Ireland

***Balaplus aforastuic* (Plastic bag)**

Specimen collected from Cobh shoreline,
Ireland

Courtesy the artist

Mustafa Faruki

American, born 1979

theLab-lab for architecture

United States, est. 2011

**Intake Facility for an
Anonymous Client** 2017

Digital prints with annotations, supplemental
digital and analog materials

The Museum of Modern Art, New York.
Gift of the architect, 2019

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Kelly Jazvac

Canadian, born 1980

Patricia Corcoran

Canadian, born 1970

Charles Moore

American, born 1947

Plastiglomerates 2013

Plastic debris and beach sediments

Courtesy the artist and Fierman, New York

When things are no longer, how do our minds remember them? To what extent is what we see material, and to what extent is it a recollection confectioned by our imagination? Slotte gives new life to everyday objects by reworking ceramic—and sometimes plastic—dishes printed with landscape designs. Taking the existing images as the basis for her interventions, Slotte surgically effaces certain traits and lines to an almost bare minimum, often transforming decorative antique patterns into exquisitely carved three-dimensional reliefs.

Skylar Tibbits

American, born 1985

Jared Lucks

American, born 1985

Schendy Kernizan

American, born 1985

Bjorn Sparrman

American, born 1989

Nitzan Zilberman

Israeli, born 1989

Heather Nelson

American, born 1997

MIT Self-Assembly Lab

United States, est. 2013

Massachusetts Institute of Technology

United States, est. 1861

with **Sarah Yasmin Dole**

Sri Lankan, born 1988

Hassan Maahee Ahmed Maniku

Maldivian, born 1989

Maldives Sandbar 2018-19

Video (color, sound, 2:30 min.)

Courtesy the designers

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Caroline Slotte

Finnish, born 1975

Damaged Goods 2009 and 2012

Tracing 2015

Under Blue Skies 2015

Going Blank Again 2016

Reworked secondhand ceramics and plastics

The Museum of Modern Art, New York.

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

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Alex Goad

Australian, born 1989

**MARS—Modular Artificial
Reef Structure** 2013

Ceramic, marine concrete, and steel;
video (color, sound, 2:27 min.)

The Museum of Modern Art, New York.

Gift of the designer, 2019

Aki Inomata

Japanese, born 1983

**Think Evolution #1:
Kiku-ishi (Ammonite)**

2016–17

Resin ammonite fossil; video (color, sound,
2 min.)

The Museum of Modern Art, New York.

Gift of the designer, 2019

PLAYING ON A LOOP:

**National Aeronautics and Space
Administration (NASA)**

United States, est. 1958

Images of Change

1972–2020

Video (color, sound, 0:56 min.)

Courtesy NASA

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Japanese, born 1983

Think Evolution #1: Kiku-ishi (Ammonite)

2016–17

Video (color, sound, 2 min.)

The Museum of Modern Art, New York.

Gift of the designer, 2019

Alex Goad

Australian, born 1989

MARS—Modular Artificial Reef Structure

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Video (color, sound, 2:27 min.)

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Each year, tons of plastic garbage wash up on Kamilo Beach, in Hawaii. Some of the debris ends up in recreational bonfires, where it fuses with the sand, creating dense conglomerates that geologist Patricia Corcoran, oceanographer Charles Moore, and artist Kelly Jazvac named “plastiglomerates.” The heavier fragments will potentially be preserved in the sediment record, leaving a permanent human-made mark in Earth’s stratigraphy.

Plastiglomerate samples are “fossils from the future,” contributing to the recognition of the Anthropocene as a new geological era—an epoch during which human activity has had profound influence on Earth’s systems.

Though Barker’s photographs appear to be taken through a microscope, they are actually long exposures of various types of marine plastic debris, captured on expired film using defective cameras. The work is inspired by the trailblazing findings of nineteenth-century marine biologist and naturalist John Vaughan Thompson, who collected plankton specimens in Cork Harbour, Ireland—the same site where these images were shot. Today, microplastic particles swarming the water column are ingested by plankton, thereby entering the food supplies of larger marine and nonmarine animals, including humans.

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Rising sea levels threaten island nations and coastal dwellings all over the world. While a common response is to create protective barriers, this approach relies on the targeted harnessing of ocean waves and sand accumulation, working not against but rather with these forces to prevent erosion. Built with local collaborators, dynamic geometric structures are strategically anchored to the ocean floor, where they channel energy from waves to build up sediment in specific areas. The process promotes natural self-organization and growth of sandbars, beaches, and islands and does away with invasive structures—usually made of concrete—that often result in dramatic modifications to marine ecosystems.

To address massive coral death due to multiple environmental pressures, new farming methods are being developed worldwide to grow different coral species until they can be transplanted back onto natural reefs. MARS (Modular Artificial Reef Structure) is a lattice system made using 3D-printed resin molds that are then cast in ceramic. Before being submerged underwater, coral fragments are attached to the structures. MARS provides a rigid skeleton on which transplanted corals can grow, and its complex geometry acts as a protective habitat for a number of other reef species such as fish and mollusks, and for the greater reef ecosystem.

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Critical Design studies the possible impact and consequences of new technologies, policies, and worldwide social and environmental trends in order to outline new goals for designers. With Foragers, Dunne & Raby represent a possible future in which the way we obtain food is radically reconsidered. They envision an “outsourced” gastrointestinal system articulated in devices that facilitate the foraging and digestion of resources that exist around us but are barely edible—tough roots and cellulosic matter that many other mammals and birds subsist on, and that our forebears used to be able to absorb.

The Anima collection is a tableware set made of food residue. For two years, Araki collected inedible leftovers such as vegetable scraps, eggshells, and bones. He divided them into those that could be burned to a charcoal state (vegetable remains, for instance) and made into molds and those (such as animal bones and skin) that could be boiled to form a gelatinous substance and formed in the charcoal molds. Araki’s goal was to reduce the amount of household and industrial food waste that ends up in landfills, where, without oxygen, it decomposes into methane, a gas significantly more toxic to the environment and heat-trapping than carbon dioxide.

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Over the course of its evolution, the octopus shed its shell in favor of velocity. There are, however, known instances of octopus species devising shelters out of coconut or mollusk shells. To explore this transmitted evolutionary knowledge, Inomata re-created an ammonite shell using 3D scanning and printing techniques. Ammonites are thought to be the ancestors of octopi and squids, and prospered for a few million years before going extinct. After placing one such shell in an aquarium alongside a small octopus, Inomata recorded the intimate encounter between the cephalopod and its ancestral biological habitat.

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Dismayed that the discipline of architecture has increasingly become an apparatus for exclusion—called upon to create border walls, detention centers, and checkpoints—theLab-lab for architecture investigates its potential to imagine alternative worlds and design outputs. Intake Facility for an Anonymous Client, set on Governor’s Island in New York, processes angels who are migrating from Heaven to Earth. Through intricate drawings, it develops a new vocabulary to translate new and unseen places, inspired by worldly concerns. By designing for angels falling from the sky to settle on this planet, the project addresses themes of displacement, xenophobia, uncompensated labor, desire, sexuality, gender, and emancipation.

Studio Swine (Alexander Groves and Azusa Murakami)

United Kingdom, est. 2011

Palm Stool from Can City 2013

Sand-cast aluminum; video (color, sound, 2:59 min.)

The Museum of Modern Art, New York.

Gift of Alice and Tom Tisch, Lisa

Tananbaum, and the Committee on
Architecture and Design Funds, 2019

In São Paulo, the overwhelming majority of the city's recyclables are gathered by an informal economy of waste pickers (*catadores*) who transport reusable materials on pull carts and turn them into jewelry or furniture. Following in that tradition, London-based design duo Studio Swine (Super Wide Interdisciplinary New Explorers) has devised a mobile foundry, fueled by cooking oil, to melt aluminum cans salvaged from the city's streets. The designers have pressed found objects—a palm leaf, a ceramic brick, the base of a basket—into sand, creating molds for aluminum stools.

Caroline Slotte

Finnish, born 1975

Damaged Goods, Tracing, Under Blue Skies, Going Blank Again

2009–16

Reworked secondhand ceramics and
plastics

The Museum of Modern Art, New York.
Gift of Lise Stolt-Nielsen and the
Committee on Architecture and Design
Funds, 2019

When things are no longer, how do our minds remember them? To what extent is what we see material, and to what extent is it a recollection confectioned by our imagination? Slotte gives new life to everyday objects by reworking ceramic—and sometimes plastic—dishes printed with landscape designs. Taking the existing images as the basis for her interventions, Slotte surgically effaces certain traits and lines to an almost bare minimum, often transforming decorative antique patterns into exquisitely carved three-dimensional reliefs.

Susana Soares

Portuguese, born 1977

BEE'S project 2007

Borosilicate glass

LEFT TO RIGHT:

Face Object

Fertility Object

Precise Object

The Museum of Modern Art, New York.
Gift of The Aaron and Betty Lee Stern
Foundation, 2008

Based on research into the extraordinarily sensitive olfactory system of honeybees, which are able to detect even pheromones and toxins, Soares has devised three diagnostic tools that enlist trained bees to detect diseases, perform health checkups, and monitor fertility cycles. Each object has a certain number of chambers related to the possible diagnosis—two (yes/no) for pregnancy, for instance, and three for fertility cycles. Bees are trained to detect a specific marker odor and will move into the corresponding chamber if they sense it on the person's breath.

Christien Meindertsma

Dutch, born 1980

Julie Joliat

Swiss, born 1979

PIG 05049 2006

Offset lithography and plastic

The Museum of Modern Art, New York.

Gift of the designer, 2009

Growing concerns for the environment have pushed people to learn more about the production, footprint, and ethics around all things—from food and clothes to interfaces and apps. This book tracks around the world everything made from a pig identified by a number—05049—after its slaughter at a Dutch farm. The single pig was used as raw material in 185 different food and non-food products. The project raises interesting questions and dilemmas. For instance, when pig bones are used to manufacture train brakes, can anyone really be kosher, halal, or vegan?

SKIN



SKIN → COLLAGEN → GELATINE → WINE

In the production of wine, gelatine can be used as clarifying agent. The gelatine reacts with the tannins and bitter substances and absorbs cloudy elements that can then be separated from the drink.

35



WINE

2613 g



BONES + BONE ASH + FINE BONE CHINA FIGURINE

Bone ash is added to fine bone china to achieve a high degree of strength and translucency.
Amongst other things, it used for making hand painted figurines.

FINE BONE CHINA FIGURINE

16 939 g

Dunne & Raby

United Kingdom, est. 1994

Anthony Dunne

British, born 1964

Fiona Raby

British, born 1963

Designs for an Overpopulated Planet: Foragers 2009

Glass-reinforced plastic; video
(color, sound, 2:52 min.)

LEFT TO RIGHT:

Algae Digester

Grass Processor

Augmented Digestive System

Tree Processor/Digester

The Museum of Modern Art, New York.
Gift of The Contemporary Arts Council,
2011

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Atelier Luma/Luma Arles

France, 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

The Museum of Modern Art, New York.

Gift of the designers, 2019

The Algae Lab at Atelier Luma, an experimental cultural center based in Arles, France, explores the potential of growing micro and macro algae-based biomaterials. Marine plants are locally sourced and then cultivated, mixed, and dried in the lab to create new materials that could possibly replace all oil- and fossil-fuel-based plastics, absorbing carbon dioxide emissions in the process. Collaborating with designers and communities across the Mediterranean and reactivating local economies, the team behind Algae Lab intends to map a network of resources, know-how, and cultural archives within the basin.

Aki Inomata

Japanese, born 1983

Think Evolution #1: Kiku-ishi (Ammonite)

2016–17

Resin ammonite fossil; video (color, sound,
2 min.)

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David Benjamin

American, born 1978

The Living

United States, est. 2008

Hy-Fi Bricks 2014

Corn stover and mycelium

The Museum of Modern Art, New York.

Gift of the architects, 2015

A unique interdisciplinary studio founded by architect David Benjamin, The Living has produced several tangible, inhabitable examples of restorative design. The Hy-Fi building was the winner of the 2014 Young Architects Program competition for an “urban beach” at MoMA PS1 in Long Island City, New York. A three-pronged tower shaped to maximize airflow, Hy-Fi was made of bricks fabricated from a “grown” composite made of cornstalks bonded with mushroom mycelium. It was a paragon of organic, sustainable, and biodegradable architecture: at the end of the summer, the installation became compost.

Christien Meindertsma

Dutch, born 1980

Acoustic Fur 2018

Acoustic textile felt, Kvadrat textile leftovers, and magnets

The Museum of Modern Art, New York.

Gift of the designer, 2019

Tasked with imagining potential applications for an upcycled end-of-life textile, designer Christien Meindertsma created a wall piece made of thin strips of acoustic felt that can be attached to a surface covered with magnetic wallpaper. The wool felt bands can be arranged into a free-form composition, and, depending on their density, their noise-reduction properties will grow more or less effective. After the magnets are removed, the material can be shredded into small particles for use in other capacities. The project responds to the growing global waste issue, and encourages designing with a circular-economy mindset.