Buried underneath layers of tar, sand, and epoxy are items that Henrot purchased from eBay or from street vendors in various cities. The objects are swollen but bear telltale signs of the things at their core. Some shapes, like the hockey stick, are still faintly recognizable. Electrical cords emerge from other items, like the hairdryer. By collecting cheap consumer appliances, everyday tools, and playthings from both online and physical markets—and then preventing their use—Henrot thwarts the normal flow of objects, commodities, and digital networks of exchange.

Camille Henrot (French, born 1978) Augmented Objects, 2012

"A video game that plays itself," as Cheng describes it, this digital simulation is generated in real time with no fixed beginning or end. Created using the Unity engine, a popular software tool for developing 3-D video games and AI models, the animation takes place far in the future. It tells the story of Talus Twenty Nine, an artificial intelligence that oversees a lush terrain in which new plants and animals constantly evolve in a Darwinian setting. The AI resurrects an ancient cadaver from the twenty-first century, and summons a pet dog to guide the undead through this posthuman world. Every time the program is run, a new scenario unfolds. The result is an endlessly changing, fantastical model of biological evolution and machine learning in the absence of human life.

Ian Cheng (American, born 1984) Emissary Forks at Perfection, 2015–16

In her series It's Not My Body, Pryde gives us machine visions of organic life. She superimposes MRI scans of a human embryo in its mother—medical images made using strong magnetic fields—against high-resolution photographs of seemingly alien landscapes. Here, the entire work is tinted in washes of purple and magenta, a dreamlike picture of technological and biological forces of reproduction.

Josephine Pryde (British, born 1967) It's Not My Body XII 2011

A camera appears to fly around the artist's studio, zooming in on Jeff Koons's iconic stainless-steel sculpture *Rabbit* (1986), with the room mirrored in its surface.
But you never actually see a camera in these reflections. The scene seems to have come from nowhere, a world without origin or explanation. In fact, the sequence is a computer-generated animation, which was then transposed to 16mm film. The work retrofits a digital simulation depicting physical things into a whirring cinematic loop. Leckey has said that once an image of an object "is in your hands, then you can start to squeeze it, squish it; it's totally plasmatic."

Mark Leckey (British, born 1964) Made in 'Eaven, 2004

This dizzying constellation of digitally rendered spirals and vortices takes shape in specialized resins and polymers. Each structure is an experiment in computer-controlled additive manufacturing, in which material is fused in successive layers. Typically used for rapid prototyping, the technology was here deployed to produce unusually complex geometries. Auerbach focuses on the helix, a spiral shape found throughout both nature and mathematics, as what she calls a "machine that powers the world," a miraculously universal code or blueprint for life. The sculpture also refers to an exploded diagram of an engine, its parts dismantled to reveal their order of assembly. The delicate forms are both mystical and mechanistic, hovering between twodimensional graphics and three-dimensional modeling, symmetry and irregularity, irrational belief and rational system.

Tauba Auerbach (American, born 1981) Altar/Engine, 2015

Ultrasound gel is a viscous, synthetic compound. It is also an efficient conductor, allowing a probe to better transmit highfrequency sound waves into a body (often female)—and enabling the technological imaging of internal tissues normally invisible to the human eye. In Yi's work, the medium is poured into seven plexiglass vitrines, each tinted green on its underside and lit with a soft glow. Thousands of metal pins are scattered throughout each vessel, slowly rusting over the course of the exhibition and leaching blood-red capillaries into the gel. The work morphs and decays as if a biotech experiment gone wrong, yielding a primordial ooze subject to forces we cannot directly perceive.

Anicka Yi (American, born South Korea 1971) Shameplex, 2015

At any one moment, Thornton's video depicts seagulls flocking near the long-defunct—but still-standing—Parachute Jump ride at Luna Park in Coney Island, Brooklyn. This scene is rendered in an array of different media, from black-and-white to color film, broadcast television to digital video, phonography to synthesized audio, all produced through digital manipulation. As this tour of historical formats and infrastructures unspools, Thornton foregrounds the ways in which technology both shapes and is shaped by our understanding of time. Built as an engineering marvel for the 1939 World's Fair, the amusement park ride is resurrected as a virtual rumination on obsolescence and enchantment.

Leslie Thornton (American, born 1951) Luna, 2013

Data is the new oil: the world's most valuable resource. Enabled by the internet and social media, the massive quantities of information being uploaded, aggregated, and exchanged today are crucial to contemporary technologies such as facial recognition. Paglen traces this recent development to its military origins. The artist selected ten photographs from a database of thousands of images taken of military employees in the mid-1990s used to develop Face Recognition Technology (FERET) by the US Department of Defense. Faint letters mark the corners of each person's eyes, noses, and lips. By comparing the physical features of many different faces, an algorithm could be taught how to "see"—and identify—individuals. The more faces, the smarter the algorithm. Before social media, Paglen shows us, military research had begun to convert human bodies into ever-growing data sets that could power vast systems of surveillance and control.

Trevor Paglen (American, born 1974) It Began as a Military Experiment, 2017

McMillian's enormous soft sculpture could be a portal to another world. Fabricated from industrial-grade black vinyl—once a state-of-the-art material—the hanging plastic form is sutured together with white thread. The stitching creates a yawning aperture that seems both organic and synthetic, an opening onto the cosmos but also into an interior void. The artist himself has spoken of his work in relation to science fiction, and of "the black body as a kind of portal, or black hole": a space of tremendous energy, at once apocalyptic and futuristic.

Rodney McMillian (American, born 1969) Succulent, 2010

Copper ore undergoes an extensive mining and extraction process before becoming the refined material embedded within virtually all our electronics—smartphones and cars, computers and cables. Rarely visible in these devices, the metal is on full display in Lewitt's serpentine etching. To produce the work, the artist collaborated with a circuit board manufacturer to print the digital rendering of a snakeskin onto a copper-clad plastic sheet. Lewitt then interrupted the normal fabrication process to selectively etch away regions of the copper substrate, while preserving layers of material that would have otherwise been removed. Forged through disruption, Lewitt's altered circuitry hints at the materials, labor, and energy that lie behind all industrial technologies.

Sam Lewitt (American, born 1981) Weak Local Lineament (Copperhead 08), 2014

The three transparent objects here were produced using a groundbreaking method for 3-D-printing glass that Oxman—an architect and designer—and her laboratory recently developed. Operating at 1,900 degrees Fahrenheit, the system layers ribbons of molten glass to create complex, digitally designed forms. The more intricate the pattern, the stronger the glass becomes. In the future, the material may even be used to build architectural structures.

Two colorful resin forms, titled *Imaginary Beings*, are another experiment in digital fabrication. Drawing on biological and mathematical shapes, Oxman has created prototypes for wearable tech that can support, protect, or alter the body—combining new materials with geometries that could never have been realized using traditional manufacturing.

Neri Oxman (American and Israeli, born Israel 1976) Mediated Matter Group (Cambridge, MA, est. 2010) Imaginary Beings (Daphne), 2012

Neri Oxman
(American and Israeli,
born Israel 1976)
Mediated Matter
Group (Cambridge,
MA, est. 2010)
W. Craig Carter
(American, born
1961)
Imaginary Beings
(Gravida), 2012

Neri Oxman
(American and Israeli,
born Israel 1976)
Mediated Matter
Group (Cambridge,
MA, est. 2010)
with John Klein,
Markus Kayser,
Chikara Inamura,
Giorgia Franchin,
Peter Houk, and
Michael Stern
Glass I, 2015

Since the early 2000s, Price has been fascinated by vacuum forming, a process in which plastic is heated and sucked against a mold. The artist repurposes the technique, traditionally used for commercial packaging, and casts unusual objects: here, he forced PVC over the mold of a bomber jacket. Crude deformations, bubbles, and creases run throughout the warped surface, rendering the military garment strange.

In the 1950s, plastic—with its astonishing elasticity—became the emblem of the postwar industrial miracle, signaling the endless possibility of new materials. Price has even compared the malleability of plastic to the infinite possibilities of digital manipulation. But *Vintage Bomber* appears to arrest such fluid forms in suspended animation.

Seth Price (American, born Israel 1973) Vintage Bomber, 2006

Two slide projections, dissolving into one another, feature images of an industrial site being destroyed and reconstructed. These scenes of urban upheaval, infrastructure, and engineering are echoed in Magdy's experimentation with materials. To achieve the discoloration in these slides, the artist exposed the film stock to household chemicals, a technique he describes as "pickling." Magdy has said that his work with destroyed film "came from a need to find a tool to communicate ideas related to loss, destruction, confusion, and the apocalypse." "Unlike digitally altered images," he explains, "chemically altered film makes the slides tangible objects, a physical testimony to a laborious process."

Basim Magdy (Egyptian, born 1977) The Hollow Desire to Populate Imaginary Cities, 2014

Fifteen different smoothie flavors line the shelves of Kline's light box-encased commercial refrigerator. Each bottle lists the unorthodox ingredients contained within, including latex gloves, octopus ink, Ritalin, and fragments of Google Glass eyewear. These high-tech materials, synthetic chemicals, and organic substances evoke specific locations as well as contemporary lifestyles, industries, and brands. With titles like "Big Data" and "Supplements," the indigestible "drinks" in this glowing cooler make plain the ways in which our bodies have been engineered, chemically altered, and transformed by technologies of consumption.

Josh Kline (American, born 1979) Skittles, 2014

Holography remains one of the most effective forms of virtual reality—generating three-dimensional images that can be viewed in the round. Bourgeois worked with a hologram studio to create these spectral images of her own sculptures of cages, chairs, limbs, and beds, rendered one-to-one in scale and glowing red. Lasers were used to illuminate the objects, which in turn scattered light waves directly onto the recording medium: a silver halide emulsion similar to that of photographic film but much higher in resolution. Bourgeois's holograms highlight the ways in which simulation is often perceived as uncanny—as surreal rather than real.

Louise Bourgeois (French, 1911–2010) Untitled, 1998–2014 For Farocki, technology was never neutral. In this video, the pioneering filmmaker collected images from military and industrial surveillance devices to explore the increasingly complex relationship between humans and hardware, battlefields and factories, war and capital. On the one hand, we see footage from aerial reconnaissance, targeting, and bombing strikes; on the other, scenes of material production, labor, and manufacturing. Farocki's piece puts the body and the machine side by side, with the former being overtaken by the latter: the eye replaced by automated drones, cameras, and weapons.

Harun Farocki (German, 1944–2014) Eye/Machine I, 2001

Perry has turned two exercise machines into interactive sculptures that merge physical exertion and virtual experience. You are invited to ride the bicycle, while the artist's avatar—designed in Blender, an opensource 3-D-rendering program—speaks from video monitors. The rowing machine's resistance mechanism has been filled with hair gel, making it difficult to use. The Chroma Key Blue backdrop recalls the blue screens used in digital video editing as well as the "blue screen of death" from a computer crash. These machines and bodies are rogue, refusing to perform as expected.

Working out becomes a meditation on work itself. Perry specifically addresses the histories of labor in the African diaspora—and the violent engineering of bodies into expendable commodities, material resources to be extracted. One of the videos depicts a digitally rendered seascape and details of J. M. W. Turner's 1840 maritime painting *The Slave Ship.* But Perry also explores the possibilities of technology in evading or resisting expropriation today. The artist describes blackness, as a state of being, as having the capacity to "shift, morph, and embody technology to combat oppression and surveillance. . . . . Blackness is agile."

Sondra Perry (American, born 1986)

Wet and Wavy Looks—Typhon coming on for a Three Monitor Workstation, 2016

Graft and Ash for a Three Monitor Workstation, 2016