SUMMER 2018
DEAR COOPER HEWITT FRIENDS,

Cooper Hewitt is infused with the pleasures and possibilities of sensory design. From The Senses: Design Beyond Vision engaging our powers of perception in the Barbara and Morton Mandel Design Gallery to the colorful iconic works and rare color treatises on the second floor to the hands-on explorations of sound design, accessible design, and more in the first-floor Process Galleries, visitors are experiencing design with all of their senses. It’s an evocative, unforgettable encounter with the latest research and innovative uses of our sensory acumen to enrich and improve daily life for all.

In that spirit, our cover highlights one of our most recent acquisitions, a digitally printed, hand-wetted silk from the experimental Dutch designer Aliki van der Kruijs—now on view in Saturated: The Allure and Science of Color. A textile sample of the designer’s testing of the interactions of silk, digital printing inks, and water, it exemplifies the far-reaching working processes of contemporary designers who unpack and manipulate color’s fascinating properties. Accompanied by an installation of mesmerizing textiles designed and woven by the master colorist Richard Landis, Saturated explores color as a physical phenomenon and a deeply personal experience. The illuminating presentation will stretch your understanding and appreciation of one of design’s most powerful tools.

The stimulating journey continues on the third floor in The Senses, an interactive dive into design’s employment of the senses to transmit information, improve functionality, and enhance health and well-being. Welcoming to visitors of all abilities, there are contributions from eighty-four contemporary designers and design firms, and forty-eight objects and installations to touch, hear, and smell. Scent permeates a felted...
wool snowstorm designed by Christopher Brosius, visitors touch the bumpy surface of Jinhyun Jeon’s Sensory Spoons for stimulating appetite, and four wooden spheres gently vibrate against a user’s head in a tactile sound installation created by composer Alessandro Perini—to name just a few of the imaginative works installed for The Senses. This is an exhibition unlike anything you have experienced before—an optic, haptic, sonic, and aromatic adventure.

The Senses joins with our first-floor exhibition Access+Ability in emphasizing the innovations in design and technology that are broadening access to the world in ways previously unimaginable. Access+Ability has been hailed by critics for “making plain why design matters”—to quote Michael Kimmelman of the New York Times. Further adding to the exhibition’s impact, our two-week Cooper Hewitt Lab: Design Access last winter filled the museum with discussion and design problem-solving in support of inclusivity, with nearly seven hundred enthusiastic participants on campus for this unprecedented learning experience. Videos of the Lab’s Accessible Cities Symposium and more are online at cooperhewitt.org for anyone seeking to understand design’s pivotal role in driving social change.

This year’s winners of the 2018 National Design Awards are all change agents in their fields, challenging the boundaries of design and telling compelling stories of user experiences, communities, and the future of design innovation. We celebrate their achievements in this issue and encourage everyone to attend our nineteenth National Design Awards Gala on October 18. Underscoring the “national” in National Design Awards, our winners will be sharing their insights in programs this fall and winter in various cities across the country, as well as leading hands-on workshops in local schools to incubate the next generation of designers and leaders. Students and teachers working with the nation’s foremost designers bring to life Cooper Hewitt’s mission to educate, inspire, and empower.

Finally, I want to express my profound appreciation for one of Cooper Hewitt’s beloved colleagues, Sarah D. Coffin, Curator and Head of Product Design and Decorative Arts, who recently retired after fourteen years of service. With her sweeping knowledge and infectious passion for design, Sarah has made an indelible impact on Cooper Hewitt: planning record-breaking exhibitions, securing invaluable acquisitions, and representing the museum around the world with her unforgettable panache. Most recently, Sarah steered the acquisition of our stunning Tiffany Turtleback Tile Chandelier. Enjoy her essay on the significance of this innovative work of lighting design for our permanent collection and please join me in extending our very best wishes to Sarah, a true champion of Cooper Hewitt.

I look forward to seeing everyone in the Arthur Ross Terrace and Garden for Cocktails at Cooper Hewitt starting June 21!

Caroline Baumann
Director

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By Carly Bond

The Smithsonian Institution and Cooper Hewitt, Smithsonian Design Museum completed a significant restoration of the bronze and leaded glass canopy over the building’s main entrance on East 91st Street this past September. The canopy has been welcoming visitors and announcing the building’s presence in the streetscape since 1902 when Andrew Carnegie and his family first took residence. Restoration work returned this significant feature to its original splendor, and it serves as a beacon for museum patrons, the surrounding neighborhood, and the Carnegie Hill Historic District.
The Smithsonian assembled a new collaborative expert artisan team in 2014 to design and complete the restoration work. The team was led by EwingCole Architects, Jablonski Building Conservation Inc., Kreilick Conservation (bronze restoration), and Femenella & Associates (glass restoration).

The canopy is supported by a curved steel channel attached through the mansion’s stone facade, with radial steel ribs connecting to an anchoring plate to form the roof. The steel structure is clad with 442 cast-bronze pieces, each interlocking in a sequential order. Except for some of the ornamental bronze, each piece is unique in shape and detailing due to the canopy’s elliptical form. Eleven leaded glass panels are located between the radial ribs of the canopy roof structure. Each panel contains over one hundred glass lights, held together with a thin metal framework called lead caming. The historic glass lights have a delicate tint and mottled texture that varies between each piece of glass. The bottom perimeter of the canopy features a double skirt of textured glass panels supported by ornate bronze framing.

Prior to dismantling this intricate puzzle, the existing conditions of the canopy were laser scanned, producing a highly detailed 3D model. The model provided sufficient detail for the recreation of metal elements as required, and informed the contours of the reconstructed leaded glass panels to fit back into the curved roof structure. The canopy components were numbered and disassembled for conservation.

The majority of the historic bronzework was retained, which required almost five hundred individual repairs to address structural integrity and material loss. All of the bronze was cleaned to bare metal, and missing or broken pieces were recast. The metal was then given a statuary bronze finish, in keeping with the canopy’s original appearance. The eleven leaded glass panels were disassembled and reconstructed with new metal caming (strips used to join panes of art glass), and reinstallation of most of the original glazing. Any replacement of...
broken glazing was precisely replicated, maintaining the historic tint and texture of the original glass.

During the restoration the Smithsonian took the opportunity to understand modern sustainability upgrades to the canopy. Heat-tracing cable was installed to reduce the buildup of snow and ice on the canopy roof. The canopy’s original electrification system was modernized with energy-efficient lighting, and LED lighting was installed around the canopy skirt.

The Smithsonian Institution considers its assemblage of museum buildings to be among its most features and part of the greater museum collection. Cooper Hewitt is unique within the Smithsonian’s holdings in its adaptive reuse of a private residence with national significance. The museum’s 2014 reopening following a multiyear reenvisioning of its campus, offers a seamless, dynamic museum experience within a historic landmark. The canopy restoration represented a generational opportunity to repair a defining architectural feature, and return a sense of magnificent design, superb craftsmanship, and importance to the Carnegie Mansion and New York City.

On your next visit to Cooper Hewitt look for the canopy welcoming you to the front entrance and take some time to appreciate its splendor.

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**01** Canopy condition after restoration, right view.

**02** Example of 3D laser scanning documentation, depicting the canopy perimeter skirt.

**03** Canopy during reassembly.

**04** Underside of canopy during conditions assessment.

**05** Canopy condition before restoration.

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**Carly Bond** is the Senior Historic Preservation Specialist for Smithsonian Facilities’ Office of Planning, Design, and Construction.
Anne Whiston Spirn is an award-winning author, landscape architect, photographer, and the Cecil and Ida Green Distinguished Professor of Landscape Architecture and Planning at MIT in Cambridge, MA. Her writings and action research have brought forth a new state of mind among designers and the general public—provoking the integration of city and nature, advancing design theory and practice, and transforming how people see and act.

The Granite Garden, a book that “touched off the ecological urbanism movement,” according to the American Planning Association, which lists it as one of the most important books of the past century. The book presents, synthesizes, and applies knowledge from many disciplines to show how cities are part of the natural world and to demonstrate how they can be planned and designed in concert with natural processes rather than in conflict (1984, Basic Books; e-version, expected 2019).

Design for America is a national network of innovators working together to improve their local communities through design. DFA began as the brainchild of Northwestern University faculty member Liz Gerber and three of her students in 2009. Gerber saw how design could be used to bring new solutions to seemingly intractable social issues and how the training and experience could equip young people with the capacity to make change.

Design for America Leadership Studio at Northwestern University, a five-day, intensive crash course in design basics, leadership, and innovation. Leadership Studio teaches students of different disciplines from across the country the strategies they need to develop their own studios and practice human-centered design in their local communities. (Evanston, Illinois, 2011–present).

Project partner: Delta Lab.

Gail Anderson is a New York–based designer, writer, and educator. Anderson serves as creative director at Visual Arts Press, the in-house design studio for the School of Visual Arts. Previously, she served as creative director of design at SpotCo, an advertising agency that creates artwork for theater, and as a designer and senior art director for Rolling Stone. Anderson has co-authored fourteen books on design and popular culture, and has lectured about design internationally.

Spread from Rolling Stone celebrating a young Chris Rock in full Jimi Hendrix mode, one of close to 500 feature stories and 300 covers Anderson worked on during her 14 years at the magazine under art director Fred Woodward (October 2, 1997). Project partner: Mark Seliger (photographer).
Christina Kim is the cofounder and designer of dosa, a Los Angeles–based clothing, accessories, and housewares company founded in 1984 with a focus on rethinking conventional fashion industry production and sustaining artisan cultures. In-house production enables an evolving system for efficient use of natural resources, recycling, and creative reuse. Kim draws on traditional handwork techniques, particularly in India, Mexico, and Colombia, engaging local artisans and communities in long-term collaborations.

Christina Kim

Civilization was founded by Michael Ellsworth, Corey Gutch, and Gabriel Stromberg in Seattle. Since the studio’s inception in 2007, it has built identity systems, digital experiences, printed materials, environmental graphics, and exhibitions that are engaging, empathetic, and sustainable. Working with those committed to creating positive change, the studio’s clients include the National Head Start Association, The Nature Conservancy, Shout Your Abortion, The Museum of History & Industry, and The Biennale of Sydney.

Civilization

Founded by Marion Weiss and Michael A. Manfredi, WEISS/MANFREDI expands the territory of architecture by connecting landscape, art, infrastructure, and architecture. The New York firm’s projects, including the Seattle Art Museum’s Olympic Sculpture Park, Brooklyn Botanic Garden’s Visitor Center, University of Pennsylvania’s Singh Nanotechnology Center, Cornell Tech’s Tata Innovation Center, and the U.S. Embassy in New Delhi, India, seamlessly fuse architecture and nature.

Marion Weiss and Michael Manfredi

Krishna P. Singh Center for Nanotechnology, a state-of-the-art research facility with an ascending form illuminating the innovative research pioneered by the University of Pennsylvania that transcends disciplinary boundaries of engineering, medicine, and the sciences (Philadelphia, Pennsylvania, 2013).

Marion Weiss and Michael Manfredi

Founded by Chad Oppenheim, Oppenheim Architecture + Design is an architecture, planning, and interior design firm specializing in hospitality, commercial mixed-use, retail, and residential buildings worldwide. Based in Miami, with offices in New York and Basel, Switzerland, the firm creates spaces that evoke the senses, catering to both pleasure and performance. Inspiration is drawn from vernacular styles, and local resources are asserted with minimal gesture.

Chad Oppenheim

Ayla Golf Academy and Clubhouse, part of a mixed-use resort development that looks to the natural dunescapes and mountains of the surrounding desert and local architectural heritage as primary design references (Aqaba, Jordan, 2017–present).

Chad Oppenheim

Neri Oxman is an architect, designer, inventor, and professor at MIT, where she is the founding director of The Mediated Matter Group. An experimental design practice, the group combines commissioned work with scientific research exploring ways in which digital design and production techniques can enhance the relationship between built and natural environments, operating at the intersection of computational design, robotic fabrication, materials engineering, and synthetic biology.

Mushtari, a 3D-printed wearable that can change color, create food, and produce biological tissues, such as insulation for the body, designed to enable human survival on distant planets and environments. Part of the Wanderers series, the wearable skin combines a continuous internal network of biocompatible fluidic channels with variable optical transparency through the use of bitmap-based multi-material additive manufacturing (2015).

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Animation for the 21st Biennale of Sydney landing page, inspired by the Biennale’s theme, blending the shapes and colors of the Wu Xing cycle and the fluidity found in the Superposition principle (2018).

Corey Gutch, Michael Ellsworth, and Gabriel Stromberg.
LANDSCAPE ARCHITECTURE

MIKYOUNG KIM DESIGN

Mikyoung Kim, FASLA is the founding principal of Mikyoung Kim Design, an international landscape architecture and urban design firm based in Boston. Its projects—from large to small—solve challenging urban resiliency issues while always considering the unique character of placemaking. The firm’s work, including the Chongae River Restoration, Crown Sky Garden, and Prudential Plaza, celebrates the transforming experience of water and light in the city.

ChonGae River Restoration Project, a regenerative, seven-mile green corridor, provides resiliency to the hydrological systems of the city. The river source point is a symbolic cultural representation of the future reunification of North and South Korea within a highly active public plaza, framed by local stone from each of the nine provinces of North and South Korea (Seoul, Korea, 2009). Project partner: SeoAhn Total Landscape.

PRODUCT DESIGN

BLU DOT

Blu Dot was founded in 1997 by college friends John Christakos, Maurice Blanks, and Charlie Lazor. Based in Minneapolis, Blu Dot’s mission is to design and manufacture furniture that is useful and affordable and brings good design to as many people as possible. Recognized for its inventive use of materials, fabrication technology, and assembly methods, Blu Dot produces furniture that is determined by an economy of means while maintaining a playful sensibility.

Hot Mesh Chair, featuring powder-coated steel that creates a bold graphic pattern inspired by handwoven rattan and a simple, stackable tubular frame that maintains the clarity of form (Minneapolis, Minnesota, 2012).

OCTOBER 18
2018

CELEBRATE THE 2018 NATIONAL DESIGN AWARDS

A gala benefit to support Cooper Hewitt in the museum’s spectacular Arthur Ross Terrace and Garden.

MEET THE JURY

The 2018 National Design Awards Jury, comprised of a diverse group of designers and educators from around the nation, convened at Cooper Hewitt in the early spring to select the award winners.

(L to R): Rand Elliott, Diane Jones Allen, Valerie Casey, Ann Willoughby, Adi Gil, Doug Powell, Jenny Lam, Jeffrey Bernett

National Design Awards programming is made possible by generous support from . Additional funding is provided by Facebook and Bloomberg Philanthropies. National Design Award trophies are created by The Corning Museum of Glass. ndagallery.cooperhewitt.org is powered by Adobe.
Cooper Hewitt’s permanent collection includes more than 210,000 objects, which together span thirty centuries and reflect cultures from around the world. The Conservation Department’s main responsibility is the care and technical study of these pieces, to ensure their preservation for today and into the future. Founding conservator Lucy Commoner established the department in 1977 and, over the years until her recent retirement, her dedication and vision facilitated its growth into a robust and active team of four conservators. I am thrilled to have the opportunity to take the helm from Lucy as Head of Conservation, and to work alongside talented colleagues both at the museum proper and at our offsite collections storage and laboratory in New Jersey.

By working together our team provides deep expertise in the conservation of works on paper, textiles, and three-dimensional objects made of media ranging from brittle glass to pliable plastic and everything in between. We work to support curatorial priorities and exhibition plans, which may include repairing damage to collection items (known as a “conservation treatment”), identifying materials and their manufacture or previous repairs, or preparing objects and mounts prior to display or travel. We also monitor the galleries and storage spaces to make sure the climate surrounding the collections is appropriate and stable. Recent grant awards from the Smithsonian will greatly expand the department’s capabilities to both study the collections through specialized imaging techniques and optimize collections care through the creation of custom supports for particularly delicate jewelry and glass vessels. A grant from the Smithsonian Women’s Committee will allow for the treatment of an important, ten-foot-long, nineteenth-century surtout de table (an ornamental centerpiece placed in the middle of a formal dining table). This piece will be a highlight of an exhibition about tabletop designs opening this October.

Our department also works to set best practices around access to the collections for all visitors, whether first-time museumgoers or advanced research scholars. We provide guidelines for display to ensure that objects are sufficiently lit, but that sensitive media like paper or textiles that might fade or darken/discoolor following exposure to light are not damaged. Our guidelines also protect items not placed within vitrines from damage due to handling. We recently expanded our public communication to include an Instagram account, to facilitate access to those who live far away or are unable to visit in person. This channel focuses on our projects and provides a behind-the-scenes peek into life in the lab. Striving to bring openness to museum didactics, we’re working on a process video about conservation treatment of the Surtout de Table that will be shown in the gallery and available to all online.

As a team, we have adapted various strategies to balance this goal of wider access with preservation concerns. The following case studies highlight these decisions and exemplify how conservators work in collaboration with each other and museum colleagues.
**Access for the Future** Much as anyone buying a consumer digital device today worries about long-term use and obsolescence, so do conservators worry about future access to born-digital objects. Facebook Flowers (page 23), recently acquired by Cooper Hewitt, serves as an example, and provided incentive for the Conservation Department to work collaboratively within an interdepartmental team of curators, registrars, and audiovisual experts. Questions surrounding how to document, assess condition, and plan for future use of digital acquisitions exist very much at the forefront of contemporary conservation concerns, and best practices are still being developed. This ever-changing landscape creates an opportunity for our department to be impactful within our profession while supporting the museum’s mission.

3D-printed objects present similar concerns about longevity. As many industrial designers experiment with this technology, Cooper Hewitt has begun collecting examples of 3D-printed works. The museum’s collection includes 3D-printed polymers, metal, and glass, and sometimes the source design files for printing the object as well. Given the poor aging characteristics of most 3D-printed plastics, we have initiated conversations about preservation planning and future exhibition of such acquisitions. With our curators, we are in communication with the designers to learn more about their processes, and we have just established a collection of reference samples that will help us study how these materials degrade and what we can do to minimize this deterioration.

**Access via Exhibition Samples** The current exhibition, *The Senses: Design Beyond Vision* (through October 28, 2018), challenged the conservation team in its innovative use of multisensory installations. Works on display expand beyond visual impact to include audible, scented, and tactile elements. As oils and other grime present on hands cause damage to design objects beyond just making them dirty, the museum generally requests that exhibition works not be touched. Objects requiring protection are often presented in cases and behind vitrines. The multimodal focus in *The Senses* requires adopting an alternative strategy. Presenting samples to maintain interactivity—while preserving the museum objects—furthers the exhibition thesis about designing for the senses.

The Cherry Forever sidewall (wallpaper), designed by Michael Angelo for Flavor Paper, is a screen-printed wall covering with microencapsulated scented oils. The glossy cherries presented against a gold-toned background visually stimulate the visitors, while the scratch-and-sniff scent engages their senses of smell and touch. Yet scratching the accessioned object might cause irreversible damage. The museum was able to purchase an exhibition sample of the paper, mitigating risk while still maintaining the object’s required interactivity.

**Mounts and Display** The exhibition of dynamic interactive experiences often requires unique conservation attention in order to both enhance the visitor’s experience and protect against accidental damage from heavy use. For contemporary donations or loan objects to an exhibition like *The Senses*, we may provide feedback to the product designer on ways to make the project more robust for exhibition; for example, when to strengthen a fragile component on a 3D-printed work, or where to add holes or hardware to allow an object to be safely attached to a surface. The department also collaborates with staff exhibitions specialists and mountmakers to design and produce custom mounting solutions for complex and delicate objects.

The OstrichPillow by Studio Banana, on display in *The Senses*, is an example of a bespoke mount created by the textile conservator. Worn over the head instead of resting under, this soft pillow lulls its user to sleep in any situation. The curators requested an abstract headform support that would be pleasant to touch. We modeled a new form based on the museum’s existing mannequins, using archival materials with sufficient padding. Covered with black fabric and equipped with invisible internal hardware, the mount recedes from view as it communicates the object’s function, and allows visitors to safely engage with the pillow.

**The Temptation of Chocolate** When working with exhibitions of contemporary design, the conservators need to consider concerns that impact the larger museum. Jonathan Grahm’s delightful designs for Compartés’ chocolate bars, a mouth-watering addition to *The Senses*, created such a challenge. These gorgeous chocolate bars, with their decorations of gold leaf, dried fruit, edible “graffiti” paint, rainbow sprinkles, and more, attract not just their intended human consumers but also insects and pests. Though certain pests are harmless to collections items, others may infiltrate storerooms and nibble on artworks themselves. We actively monitor the museum to watch for evidence of pests, and, when necessary, employ a variety of chemical-free methods of arresting and preventing infestation.

To prevent a pest problem before it could begin, the objects conservators reviewed and tested different coatings to determine how best to reduce the chocolates’ tempting scent without impacting their attractive appearance. Custom-mixed adhesives applied to all sides of the bars provided the required protection—and enabled this feast for the eyes.
Sarah Barack, Cooper Hewitt’s new Head of Conservation and Senior Objects Conservator, has extensive experience in conservation treatment, project management, teaching, and research. Her passion for conservation, education, and outreach, combined with her object treatments that span archaeological ceramics to historic silver objects, and Chinese porcelain to 20th-century Plexiglas reliefs, make her an ideal addition to the museum’s staff.

For more information about conservation, the American Institute for the Conservation of Art and Historic Artifacts is the main professional body for American conservators.

conservation-us.org

To learn more about Cooper Hewitt’s conservation team follow us on Instagram: @cooperhewittconservation

01
A visitor in The Senses holding a wool snowball in the Snowstorm installation, smelling the scent of Winter.

02
MyLight MGX Hanging Lamp, 2007. Designed by Lars Spuybroek (Dutch, b. 1959), NOX Art and Architecture Studio; Manufactured by Materialise NV (Leuven, Belgium); Laser-sintered polyamide (nylon); H x W x D: 30 x 20 x 16 cm (11 13/16 x 7 7/8 x 6 5/16 in.), irregular; Gift of Materialise NV, 2010-35-1

03
Visitors experiencing The Senses, including touch and smell objects.

04
Coating Compartés chocolate bars in preparation for The Senses.
NEW COLLAR, NEW EDUCATION: HOW STEAM AND DESIGN THINKING PREPARE US FOR NEXT-GENERATION JOBS

By Nick Hahn

Ace the AP high school classes, graduate from a prestigious university, and land that dream job—most of us grew up with this prescribed path for success. Creative jobs today, however, demand novel skills and new mindsets that aren’t necessarily being taught within the current education paradigm. Careers can no longer be defined by the binary of the blue-collar versus white-collar job. There are alternative paths, especially in technology, design, and entrepreneurship—we call those jobs “new collar.” The path to landing one of these jobs can look vastly different than what we’re used to. New-collar jobs look beyond the four-year degree and instead focus on whether a potential employee has relevant skills, often obtained through vocational training. As more students are exposed to new ways of thinking, my hope is some of these students go on to become the next generation of educators aiming to train the next-next generation of creative thinkers, or new-collar workers.

We are already seeing this change in action with STEAM—the educational approach initiated by the Rhode Island School of Design (RISD) that adds the arts to the STEM (Science, Technology, Engineering, Mathematics) model. According to RISD, their goal is “to foster the true innovation that comes with combining the mind of a scientist or technologist with that of an artist or designer.”

In an effort to scale STEAM education, IBM created P-TECH (Pathways in Technology Early College High School). It blends high school, college, and career to foster students who can enter the workforce not just with knowledge, but with practical experience that combines academics, mentorship, and paid internships in its six-year program.

The skill set critical for success, yet still missing from a traditional or STEAM education, includes soft-skills such as problem identification, creativity, adaptability, and collaboration. The best ideas won’t come to fruition until we get the design, engineering, marketing, sales, and product management teams aligned to see the solutions to market.

This is where design thinking comes in.

Design thinking enables new-collar workers to create solutions that truly connect to their user’s needs and builds strong team alignment so that those solutions actually ship out the door. In my nearly twenty-year experience creating digital products, I’ve been surprised by how many product development teams lack this combination of skills to see projects through to implementation.

Currently, there is a burgeoning ecosystem of corporate and private programs aiming to bring STEAM + design thinking training to the masses for this next generation of workers. Cooper Hewitt’s mission is to inspire, educate, and empower through design. With education as a key pillar, programs are developed to offer insight and practice in design and design thinking across all levels of competency in design. Programs expose intergenerational audiences to design concepts and help connect award-winning designers with their communities to facilitate change. While not everyone who participates in these programs is a designer or will become one, an understanding of the design thinking framework could assist in prototyping solutions for problems we encounter in our daily lives. Design thinking is taught as the necessary life-skill to solve the complex problems of tomorrow.

Over two years ago, I joined IBM’s fledgling corporate-wide design program and I took on the mission of evangelizing our very own flavor of design thinking. My background in design and selling ideas came into high demand when trying to bring IBM Design Thinking and a new sustainable culture of design to over 340,000 employees worldwide. We’ve leveraged this new way of working to ship design-led innovative products, including the IBM Cloud Platform, which emerged out of our design incubator program five years ago and is now our fastest area of growth. We’ve also begun programs to introduce IBM Design Thinking to students of all ages.

In Austin, Texas, home of IBM Design’s headquarters, we’ve hosted over three hundred students to learn about design thinking and innovation. I’ve done this in conjunction...
with my own STEAM education initiative called Austin Spark League, which is focused on teaching kids the full product development life cycle, including entrepreneurship, design, and engineering. In partnership with IBM, we’ve hosted annual design-a-thons where high school students learn the art of IBM Design Thinking. Through these weekend-long events, students are prompted to solve a real-world problem that is relevant to them, do user research, envision a solution, and hone their storytelling skills through a large group presentation.

Immense focus is placed on these presentations because they teach storytelling skills so rarely exercised in classrooms. The biggest challenge students say they encountered at our events was not how to program or design, but how to communicate effectively with their teams. Failing to establish a fluid way of working across disciplines within a group leads to silos. Designing with empathy and considering the user and the audience are essential design-thinking skills our students require to prevent these silos from forming in the first place.

When asked for career advice in the creative space, I reassure students that they shouldn’t stress about their GPA, or awards, or even years of experience. What really matters are three simple things. Learn to learn quickly—new tools come out all the time and being able to adapt as they emerge is key. How well can you tell a story? The narrative they weave will help convince others of their great ideas. Check your ego at the door. Humility and collaboration will always win.

Educational collaborations like these supported by IBM and other companies can be a powerful tool that helps students see real-world applications of design thinking. The deeper mission of these initiatives is to help youngsters find their spark: that magical intersection in life when you find out what you’re good at, what you love, and what pays well. If they even get part of the way down this path, they’ll have a lot higher likelihood of finding success.

Nick Hahn is Design Manager and Design Thinking evangelist on the Watson & Cloud Platform team at IBM. He is a fifteen-year veteran of user-centered design and visual storytelling. He runs Austin Spark League, a design education program for teens that hosts summer camps, design-a-thons, and an upcoming podcast.
One of the most fascinating aspects of contemporary color is the magical glow emanating from our ubiquitous electronic screens. These luminous, dancing hues are bold and captivating, addictive even, and yet so technologically obscure and complex. A look into the origins of electronic color in postwar digital design sheds light on the tension.

By Carolyn L. Kane

Off-the-shelf commercial software arrived in the early 1990s with the assumption that its use was flexible, intuitive, and user-friendly. However, there is no way for users to find out how these colors actually work or how different people see colors differently in different contexts (even the same hue fluctuates between screens). Nor do seductive software interfaces explain that, on a technical and material level, digital color is in fact a series of algorithmic codes. At some point all creative producers had to attain an intimate knowledge of color—originally, painters had to grind their own pigments and mix their own inks, and dyers in the nineteenth century had to know a great deal about indigo and madder plants—but this has not been the case for some time. Since the 1980s, computer-based designers have been able to use colors with little interest in their industrial or laboratory histories, but the fact that digital color is a product of heightened technologization and mathematics complicates matters, making it equally a component of computer engineering and design history alike.

The two sides of digital color wedded when a few talented computer scientists and experiment-minded practitioners collaborated in the 1960s and 1970s to transform postwar technology into tools for producing some of the first computer-generated color and computer graphics. The colors that appeared from these massive number-crunching machines and former wartime technologies were so fantastic—psychedelic hues that
promised a bigger and better future for the integration of humans and machines—that many viewed them as revolutionary. As these radical forms of color appeared for the first time in computer-generated graphics, they complemented the utopian energies of the counterculture, civil rights, and the women’s movement. Mid-century designers and graphic artists went to great lengths to use brazen color as a symbol of antiestablishment and cultural transition.

Today, given the ease with which we can use equally bright and bold digital colors to create complex animations, it is hard to believe that so many of the pioneering computer graphics took hours, sometimes even weeks, to complete. The move to “user-friendly” automated color occurred through the massive shift to personal computing, “shrink-wrapped” off-the-shelf software, the graphic user interface (GUI) in the late 1980s, and the standardization of digital color in the 1990s. As a result, the once arduous but visionary field of experimental digital color came to an end, and with it, the utopian symbols that these bright colors once invoked.

By the end of the 1990s, graphic design had merged with personal computing and the Internet and a different kind of utopianism filled the air. This time, the frontiers of cyberspace and the World Wide
Web reinvigorated the world of computing, transforming pixel-pushing knowledge work into a new paradigm of design cool. Joseph Schumpeter’s call for “creative destruction” became a fashionable slogan used to pave a landscape of innovation and edgy design in yet another global village of wired e-commerce and sexy cosmopolitan connectivity.

But after the burst of the dot-com bubble, another temporary lull befell the new media. Enthusiasm was amplified once again in the late 2000s, when sleeker digital colors met another revolution through ubiquitous user-friendly interfaces and social media applications, integrated with cross-platform production techniques that had been introduced in the late 1990s. These luscious and automated electronic hypercolors “empowered” millennial designers, architects, animators, students, educators, consumers, and children alike to push, pull, and mashup media from multiple locations, platforms, and “content,” using a variety of computer, electronic, Cloud, and automated PDA devices. Color was no longer handmade, selected, or even “homegrown,” just as content was no longer “original” or “authentic.” Design aesthetics fashioned a melange of assemblage and remix. But this is not the end of the story.

Far from it. Moving forward, we must expect more from color and creativity in digital design because we are not limited to the screen or computer terminal for thinking or making. Automated software, 3D printing, and real-time global data transfer are all convenient and flexible tools for solving “off-screen” design problems. In short, digital computing no longer places severe limitations on creative production. And yet, even as digital computing grants numerous freedoms, we have also become totally and unequivocally dependent on it. How is this possible? How could digital computing become so user-friendly and unavoidable in everything we do and make? We can identify this dominant but not always easy to detect archetype in designs bearing the basic logic of any digital system: the division of discrete units (0/1, “off / on,” etc.). Designers today do not need to produce chunky pixelated designs as they did in the 1970s, and yet, many have chosen to do just this. Why? Are these attempts to articulate the pervasiveness of “digitality” in contemporary culture evidence that we all think digitally, even when we’re not using digital media? Granted not all contemporary designers articulate this binary logic, but an increasing number do. And thus, we must wonder, as digitally designed color moves further off screen and outside the lab, do contemporary trends in so-called “design thinking” ever truly escape the pervasive command and control of digital culture that shapes us all?

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Rebeca Méndez—designer, artist, professor at UCLA, Design Media Arts, and winner of the 2012 National Design Award for Communication Design—talks about identity, culture, the environment, and how her Mexican heritage and upbringing shape the way she connects to the world through design.

Since I can remember, I have always spent hours observing nature, asking “Why do living things and physical phenomena take the form they do? What are the essential mechanisms of nature?” I was born and raised in Mexico City by parents educated as chemical engineers. They taught me to see the world from a physicochemical point of view and on occasion even brought out multiple chemistry tomes when they needed to further explain a complicated concept. They instilled in me respect and love for the natural world, but most importantly for the nature of matter: its composition, organization, and behavior, its cycles and systems. In other words, they taught me to relate to the world through its design.

This lesson was instilled in me early on through my family’s summer vacations spent deep in the jungles of southern Mexico in pursuit of obscure Mayan archeological sites. During extensive expeditions, we would spend two or three months every year camping in the jungle experiencing its overwhelming presence and sounds. I could separate the loud oscillating din of cicadas from the soft roar of the howler monkeys, and feel the dense humidity that overwhelmed every facet of the environment. During these trips, I sensed the vitality, the vibrancy, the presence of everything around me. These experiences profoundly shaped my captivation with design—particularly when we camped among Mayan temples, such as Uxmal, surrounded by powerful iconography and glyphs. I would make rubbings on paper, fascinated by this ancient form of symbolic storytelling. Mayan glyphs became the doorway for my interest into graphic design.

Fundamentally, design is storytelling, but it is also a way of organizing—to classify and give structure to an otherwise vast abstract pool of elements. We know it is through our organization that we will make sense of this world, understanding who we are and our place within it. Historically design has always been a principal concept within the Mexican consciousness, beginning with the Olmec civilization (c. 1200–400 BCE). Understood to be the first society to emerge within Mesoamerica, the Olmec are credited with the invention of the calendar and the concept of zero. The early emergence of these sophisticated and complex sociocultural systems in Mesoamerica signaled not only the manifestation...
of highly evolved design, but also refined design thinking. I have always believed that my design work is the expression of the various cultures and peoples that form me as a person. My life is a historical yet continuous narrative that involves a multicultural and multiethnic amalgam, reflected through my capacity to allow chaos and multiplicity to coexist with order and minimalism. Before the word "design" even existed the Olmec understood that at its core design was system making, and I find it fascinating to consider how the genesis of our design evolution began millennia ago with America’s first civilization and the concept of zero.

It may seem that I was destined to be a designer. The idea of working with people to help make sense of a world filled with disorder, to create stories, and to communicate through graphic imagery should have been a clear path for me. Yet, I came to design circuitously, because initially I wanted to become an astronaut and my primary choice of study was physics and mathematics. As it happened, friends talked me out of these areas of study. It was actually my cousin who at the time was studying design in Mexico, who introduced me to industrial and graphic design. The fields were so new that no one could talk me out of the idea. The opportunity to explore the unknown was why I ended up in design, and it remains a driving force in my practice. At the time, I did not know much about the discipline, just that it seemed like a creative, contemporary field with a balance of both the irrational and rational mind—two thought processes that I have always straddled.

I began my studies at Art Center College of Design at a fortuitous time. In the early eighties, I was among the first generations trained to use computers for design—we were the bridge between analog and digital. Since my early years as a student and throughout my thirty-plus-year career, I have seen firsthand the incredible transitional growth from analog to digital. I began with my airbrush, Letraset and Super 8 film, and now work with augmented and virtual reality. The exponential growth of our computational power continues to change the design field and how we tell and experience stories every day. Indeed, since the beginning of time it has been society’s ability to design and produce new systems of experiencing and connecting with each other, and with the world at large, that has shaped our evolution as a species. So as a designer, artist, and educator I consistently strive to energize humanity rather than keep us isolated, depressed, or weak. I aspire to engender moments that access our imagination, our capacity to visualize, invent, and create a sustainable future for our environment and ourselves. Because if our imaginations have been entrenched in fear, we cannot invent the future, and a civilization without imagination is paralyzed.

Rebeca Méndez Selects (October 5, 2018–July 10, 2019) is the seventeenth installment in the exhibition series that invites designers, artists, architects, and public figures to examine and interpret the museum’s collection. Providing a platform for exploration and provocative visual discoveries, Méndez’s installation explores humanity’s complex relationship with nature and our ties with other species.
A superb Tiffany turtleback tile chandelier now graces the Teak Room gallery as a new addition to Cooper Hewitt’s permanent collection, thanks to Pam and Tom Gerfen / RMW Acquisition Grant under the auspices of the Architectural Foundation of San Francisco. Similar to one originally installed in what was the Carnegie Family Library, this chandelier provides an exciting bridge between the permanent collection and the museum’s home, the former Andrew Carnegie Mansion. Appearing in Passion for the Exotic: Louis Comfort Tiffany and Lockwood de Forest as a generous loan from Macklowe Gallery, this chandelier shows the impact of Tiffany and Lockwood de Forest’s work together. Friends and former professional partners, the two continued to collaborate after dissolving their company. The placement of a turtleback chandelier was part of their mutual understanding of de Forest’s intended overall effect on the room, accentuating the golden color and interacting with the patterns on the walls based on Indian jali screens. When the Gerfens, appreciators of Tiffany’s work, saw the lamp installed from the same point as the original, they understood the educational benefits not only of the innovative nature of Tiffany’s glass but as a display of how light can define space. The result is the very rare opportunity to see a Tiffany turtleback chandelier in its original appearance and context—a key to understanding this aesthetic interior and the impact on it of a lit turtleback chandelier.

Design director: Louis Comfort Tiffany (American, 1838–1933)
Produced by Tiffany Studios (New York, New York, USA)
Press-molded and leaded glass, patinated bronze
Museum purchase through Pam and Tom Gerfen / RMW Acquisition Grant, 2018-1-1
FAMOUS FAILURES, FROM THE FACEBOOK FLOWERS SERIES, 2012

What does virality on social media look like? In 2012, Facebook posed that question to San Francisco–based design firm Stamen Design, winner of the 2017 National Design Award for Interaction Design. Facebook selected three photos posted by George Takei (who is among Facebook’s most viral accounts), which each had hundreds of thousands of shares and re-shares. Stamen sketched and analyzed each post’s anonymous user data. What anomalies or gaps did the datasets hold? What trends and consistencies appeared? What were the datasets’ overall shape? How did they move?

Data visualization involves choices. Owing to the size of the dataset, Stamen developed a people-as-particle concept, treating each share as a particle in the system. Within the data, they identified gender, share generation, and time of share as salient data lines. Experiments tested particle motion, trajectories, and velocity.

The data rendered in the final, mesmerizing visualizations bloom like flowers as the picture is passed from friend to friend. Each share generates a slender filament. Re-shares continue as extensions of that filament. Popular people are revealed as a new tendril bursts forth. The patterns echo natural phenomena and living organisms—freezing water, plant life, bacteria, or coral—a phenomenon that Stamen’s designers see repeatedly in vast and complex datasets.

Acquiring born-digital work is a collaboration for any institution. To enable this acquisition, Briana Feston-Burnet, the Variable and Time-Based Media Conservator at Smithsonian’s Hirshhorn Museum, worked closely with Jessica Walthew, Objects Conservator at Cooper Hewitt, to analyze the video and accessory files.
The insignia of Chevalier of the Order of Arts and Letters (Ordre des Arts et des Lettres) is bestowed twice annually to only a few hundred people throughout the world. Rooted in the tradition of heraldic medallions, the medal takes the form of an eight-sided, silver double cross with green enamel between the arms. In the center, a calligraphically intertwined A and L are encircled by the words “République Française.” It hangs on a ribbon of vertical stripes of emerald and white.

Founded in 1957, the Order of Arts and Letters was created in acknowledgement of France’s potent legacy in the fields of literature and the arts. Raymond Subes (French, 1891–1970), a polymath designer whose lengthy career is emblematic of the aims of the Order, designed the medal in the same year. Subes is best known for his decorative ironwork, which graced the stairways, doors, and lights of Parisian apartment buildings as well as French churches, banks, and transatlantic ocean liners. Subes’s work featured prominently in international expositions of the 1920s and ’30s and his metalwork fit into broader French and American trends linked to Art Deco furnishing. Like so much of Subes’s work, the medal for the Order of Arts and Letters displays technical sophistication and a design that gracefully integrates the historic traditions of metalwork; in this case a clever reimagining of the arabesque motif culminates in a modern, global medal with an eye toward the future.

On March 5, Director Caroline Baumann received the insignia of Chevalier of the Order of Arts and Letters by Bénédicte de Montlaur, Cultural Counselor of the French Embassy, in recognition of her significant contributions and decades of dedication in supporting impactful French design. Cooper Hewitt’s collection contains more than 35,000 French design objects, and it is most fitting for Paris-born Baumann, who carries forward the passion of the collection’s founders—Sarah and Eleanor Hewitt—for French history, style, and design, to sport this elegant medal.
01 MINI RAIN EARRINGS
$248.40 / MEMBER $223.56
By Annie Costello Brown

02 VOTIVES
$20.00 EA. / MEMBER $18.00 EA.
By Malin + Goetz
Scents: Dark Rum, Neroli, Mojito, Otto

03 BINARY FELT BRACELET
$65.00 / MEMBER $58.50
By Maria Eife

04 BINARY FELT NECKLACE 2
$20.00 / MEMBER $18.00
By Maria Eife

05 EXCLUSIVE NEON NET BAG
$231.00 / MEMBER $207.90
By Doug Johnston

06 SA5100 SUPER FLUORESCENT POUCH
$144.00 EA. / MEMBER $129.60 EA.
By Comme des Garçons

07 SHORT STACK EDITIONS
$14.00 EA. / MEMBER $12.00
By Short Stack Editions
Volume 8: Honey
Volume 30: Butter
Volume 27: Coconut
Volume 31: Cauliflower
Volume 16: Peaches
01 SNOWSTORM  
$110.00 / MEMBER $22.50–$27.00
Developed exclusively for Cooper Hewitt; no smell is more subtle, magical or serene than the scent of falling snow.

02 SHARE FOOD  
$25.00–$30.00 / MEMBER $22.50–$27.00
With angled bases, sharing from these dishes becomes a balancing game around the table, encouraging community.

03 CYRANO  
$99.00 / MEMBER $89.10
A portable scent speaker that diffuses a changing sequence of scents from “playlists” created through an app.

04 OSTRICHPILLOW  
$99.00 / MEMBER $89.10
An environment of maximum comfort and privacy that isolates the head and hands (mind and body) for power naps anywhere.

05 EATWELL  
$60.00 / MEMBER $54.00
Assistive tableware that features curves, slanted chambers, and high-contrast color for ease of use and appetite stimulation.

06 THE SENSES: DESIGN BEYOND VISION  
$30.00 / MEMBER $27.00
A call to action for a multisensory design practice, with thematic essays on topics ranging from inclusive design approaches to creative uses of sensory experiences.