

# Art in America



812 OCTOBER 2016 COVER BY HITO STEYERL

# THE DIGITIZED MUSEUM

by **Brian Droitcour**  
and **William S. Smith**

AMONG THE SUBTLER indications that technology is driving profound changes in cultural institutions are the new words and symbols that have cropped up in museums' communications to their visitors. A curator's introduction, printed in vinyl on the wall, might have appended to it an official hashtag to be used in posts about the show to Twitter or Instagram. A label might have the lopsided grid of a QR code, to be scanned for further information about the work nearby. When the Whitney Museum of American Art staged a Jeff Koons retrospective as the final show at its Madison Avenue location in 2014, slips of paper inserted in pamphlets for teens advised: KOONS IS GREAT FOR SELFIES!

These forms of address normalize and affirm behavior that has become habitual as more and more people carry networked computers in their pockets. Museumgoers text their friends or compose work emails. They consult Google for more information about an artist. They pose for photos to commemorate the visit on Facebook. So it should come as no surprise that museums have met them halfway, attempting to claim institutional authority in the field—and feeds—of online communication. One example is #museumselfie day, an annual, internet event launched in 2014, shortly after the Whitney hosted a symposium on museums and social media where discussion focused largely on photography policies. Accepting the inevitability of smartphone use in and around their galleries, museums try to harness it to heighten their own appeal. But the internet, unlike the white cube, is messy. Serious debates about access and pedagogy on #artsed compete with more frivolous ones on #emojiarthistory. The

question isn't *if* museums will participate in these exchanges, but *how* they will. Are curators allowed to send glib tweets on #askacurator day? Will a museum invite the public to catch Pokémon in front of a Parmigianino?

Most changes to the attitudes and actions that define the museum experience have been catalyzed by visitors' personal mobile devices, rather than by high-tech gallery infrastructure. While some art institutions have introduced digital information kiosks and touch-screen displays, most have avoided installing costly hardware that has to be upgraded or replaced every few years. The most ambitious digital interventions in galleries have been temporary. In summer 2015, New York's Metropolitan Museum of Art launched *The Return*, an interactive installation by Reid Farrington commissioned to celebrate the successful twelve-year restoration of Tullio Lombardo's *Adam* (ca. 1490–95), a marble sculpture that had been shattered in a 2002 accident. *The Return* featured a life-size digital rendering of *Adam* displayed on a screen adjacent to the restored sculpture. The 3D avatar was synced to the movements of a live performer out of view, and seemed to interact with docents and visitors. The digital Adam was a fleeting spectacle designed to generate attention for the virtuoso, but often unsung, work of conservators and to attract visitors to a key portion of the Met's historically diverse collection, much like the earlier illumination of the Temple of Dendur with colored laser light.

DIGITAL MEDIA have also brought more durable changes that can't be seen by the average museum visitor. Some of the biggest structural shifts are happening in the staff offices. New positions

João Enxuto  
and Erica Love:  
*Anonymous*  
*Painting 3D #V2*  
*GE\_W202\_01*,  
2013, inkjet print  
on cotton, 60 by  
40 inches.



Small, illegible text label on the right side of the painting.

## Novel technologies can attract new audiences and excite potential donors, creating a feedback loop of engagement and financial support. Or at least that's the hope.



A Google Cardboard viewer used to virtually experience Pieter Bruegel's painting *The Fall of the Rebel Angels*, 1562. Courtesy Royal Museums of Fine Arts of Belgium, Brussels, and Google Cultural Institute.

have been created to steward the integration of strategies and methods for using digital media across long-standing disciplinary divisions. In the last four years, nearly a third of major US art museums have appointed “digital directors.”<sup>1</sup> People employed in these positions come from a variety of backgrounds—from scholarship to communications to IT—and the exact titles vary (“manager of museum digital strategy,” “deputy director for digital experience,” “director of digital adaptation”). What matters is that these new officials don't report to directors of communications and marketing, as digital managers do at the many institutions that haven't established high-level positions. Rather, they report directly to senior museum leadership.

While not a digital director, Paola Antonelli, curator of design at New York's Museum of Modern Art, has been at the forefront of efforts to integrate digital technologies into curatorial departments. She coded websites for her exhibitions in the 1990s. Some of the most innovative digital projects today attempt to transform the museum's homepage into something more than an ad or a directory. The website for the Walker Art Center in Minneapolis features artists' op-eds, art historical research, and a selection of cultural news from other resources. Likewise, the San Francisco Museum of Modern Art's Open Space blog goes beyond highlighting what's happening at the museum, hosting critical discussion for local and national arts scenes. It also serves as a platform for multimedia artwork. Many institutions have undertaken major initiatives to publish collection data and reproductions of artworks online, along with museum archives.

Extending the purview of digital innovation beyond marketing can provide new avenues for creative work, scholarship, and institutional openness. But more often than not it tends to infect those fields with practices from the business side, exacerbating the

increasing influence of marketing and fund-raising departments in museums over the last several decades. Curators are now confronted with analytics about who is visiting their shows and how those visitors are interacting with the displays—analytics that prompt everything from implicit managerial pressure to direct recommendations for increasing attendance. In order to get the money they need to launch ambitious projects, museums often have to define their mission in terms that make sense to nonprofit foundations funded solely by number-crunching technology companies.

One organization at the forefront of efforts to digitize museums is the Google Cultural Institute, a nonprofit offshoot of the Silicon Valley behemoth Alphabet. The GCI uses Google Street View technology to create 360-degree representations of museum galleries. Anyone with internet access can simulate the experience of wandering through the Hermitage's grand halls, the Met's Northern Renaissance collection, or the galleries of the Archaeological Museum in Harappa, Pakistan. In some of the bigger institutions that participate in the Google Art Project—the branch of GCI that works with museums—paintings and sculptures under copyright protection are blurred, like the faces of people captured by the cameras on the Google vans that photograph streets, underscoring the limits of the access Google provides.

And yet the GCI offers a viewing experience that, in other ways, far surpasses that of a real gallery. So-called gigapixel captures—ultra high-resolution images of paintings—enable viewers to “go deep,” as lead Google engineer Amit Sood explained in a 2011 TED Talk. Visitors can zoom into the backgrounds of old master landscapes, presented at some ten billion pixels, and study details that are difficult to discern with the naked eye. Given its depth and complexity, Pieter Bruegel's work has often been used by Google to demonstrate the amazing possibilities of this and other imaging technologies.<sup>2</sup> Working with the Royal Museums of Fine Arts of Belgium, GCI recently produced animated virtual reality representations of some of the Flemish artist's masterpieces. A smartphone video player combined with Cardboard, Google's VR viewer, transformed *The Fall of the Rebel Angels* (1562) into a dynamic, immersive environment in which a cast of demonic antagonists appears to wrestle and fight.

Where is the line between enriching the experience of viewing a work and fundamentally transforming it? It's exciting to see a 450-year-old painting or a 500-year-old statue (like the Met's *Adam*) set in motion. But when the museum and its corporate partners bring these works “to life” with cutting-edge tech, are they also implicitly declaring the death of the static art objects that fill physical galleries? In 1999, museum historian Karsten Schubert predicted: “As more and more aspects of our lives become virtual, our fetishist fixation on the museal object may grow in accordance.”<sup>3</sup> But the increasing prevalence of spectacular animations of “dead” works makes Schubert's assertion ever harder to accept.



View of Reid Farrington's installation *The Return*, 2015. Courtesy Metropolitan Museum of Art, New York. Photo Thomas Ling.

The value of the static object seems to decrease as museums satisfy cravings for mobile, flexible media.

MUSEUMS AIMING to enrich and enliven encounters with their collections through digital means face significant challenges. Chief among them is the expense of building and maintaining the necessary infrastructure. Though a robust social media presence can be a comparative bargain, gigapixels don't come cheap. At a time when most museums are slashing staff and struggling to raise funds, it may seem irrational to pursue digital spectacles that could be dismissed as luxuries, or broaden virtual access when brick-and-mortar institutions require upkeep. Yet novel technologies can attract new audiences and excite potential donors, creating a feedback loop of engagement and financial support. Or at least that's the hope.

The tech buildup parallels the contemporary boom in museum construction in this sense. "Institutions that already had to beg for funding were drawn into building more expensive facilities," critic Ben Davis argued in a recent *New York Times* Op-Ed. "It is evidently still easier to raise money for fancy new things than to maintain what is already here. . . . So, have museums been growing? Yes. But on a sustainable basis? No."<sup>4</sup> Apps, VR displays, and touch-screen kiosks might be considered examples of "fancy new things," along with shiny new wings by famous architects. Well-funded organizations like Bloomberg Philanthropies have enthusiastically supported such digital initiatives, partnering with cultural institutions of various sizes around the world in the name of easier access to art through technology.

But there are reasons to be wary when private-sector entities rush to bridge the gap between public museums' digital aspirations and their brick-and-mortar realities. Google may currently share its high-res images with the world, but the valuable data ultimately lives on its servers. The British Museum had been

working on independent technology to represent its galleries online, but then in 2015 it abandoned the project, citing expense, and handed over the data to Google. What does it mean for paintings held in the public trust by institutions that receive taxpayer subsidies to be converted into partly privatized pixels? Copyright laws in this area are murky, and there's no way to know what return on investment the private tech companies partnering with museums will expect in the future.

While the effects brought about by digital media aren't as readily visible as construction, they are arguably even more important. Museums aren't just sharing data they already have. They are producing new kinds of data. Mobile apps, such as the one launched by the Dallas Museum of Art, offer access to virtual representations of the museum's collection and extended texts about exhibitions, but they also track users' movements in the galleries and log information about their preferences. The museum's role as custodian of objects is doubled by a new role as custodian of data. And if the purpose of preserving art objects is to serve the public—those future artists, students, and seekers who might find inspiration or solace in them—the purpose of maintaining a data stockpile is less romantic. The digitization of the museum prompts a renewed examination of whom the institution serves, and to what ends. ○

1. To obtain this figure, we selected sixty-one US art museums and read their online staff directories and press releases to find hires and appointments in these newly created positions.

2. Bruegel's work also appears in the 1972 Soviet science-fiction thriller *Selaris*, where director Andrei Tarkovsky does a lingering close-up pan of *The Hunters in the Snow* (1565), kept in facsimile on a spaceship, which he offers, perhaps, as a symbol of the mystery of the human spirit as it confronts a strange alien intelligence.

3. Karsten Schubert, *The Curator's Egg: The Evolution of the Museum Concept from the French Revolution to the Present Day*, third edition, London, Ridinghouse, 2009, p. 152.

4. Ben Davis, "How the Rich Are Hurting the Museums They Fund," *New York Times*, July 22, 2016, nytimes.com.