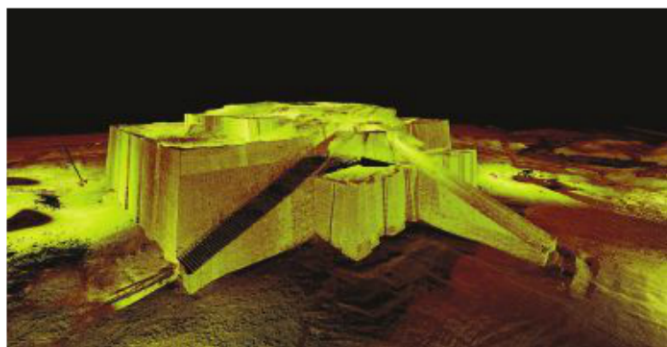


The year in heritage: digital scanning promises a brave new world

Earlier this year, archaeologists (as well as every 40-year-old whose childhood dream was to be the next Indiana Jones) were thrown into wild excitement when radar scans revealed that Tutankhamun's tomb may contain a secret chamber. The discovery gave credence to a theory that Nefertiti—the chief consort of Tutankhamun's father—is buried in the concealed room. Although a follow-up examination drew contradictory conclusions that require further tests, investigations that could lead to “the discovery of the century” are possible only because Nicholas Reeves, the archaeologist who proposed the theory, had access to three-dimensional, forensically accurate imaging data recorded in high resolution. He studied the surface and shape of the walls from the comfort of his New York office some 9,400km away from the Valley of the Kings.

The enormous potential of applying three-dimensional imaging technology to the world's heritage is not lost on the wider heritage community. In fact, its use has increased exponentially in recent years thanks to considerable advances in scanning capabilities. Making use of this technology is particularly appropriate now as threats to heritage are at an all-time high because of war, climate change, urban encroachment and, sadly, neglect.

The executive director of the UK arm of the heritage preservation organisation World



Laser-scan data of the Ziggurat of Ur in Iraq, the first scanning site for Project Anqa in Syria

Monuments Fund, John Darlington, cites the falling cost of technology as a contributing factor. “Five years ago, drones were beyond the reach of the average individual, but today they are ubiquitous,” he says. Drones, along with various types of two and three-dimensional recording, are being used by Factum Arte to document the Cross River (or Ikom) monoliths in eastern Nigeria.

Factum Arte is also working with the University of Basel and Egypt's Ministry of Antiquities on creating a scanning and training centre for the Theban Necropolis, so locals can learn and pass on the skills required to record their heritage. The centre will move to the newly restored Stoppelaere's House—a 20th-century building designed by the late Egyptian architect Hassan Fathy—in March 2017.

Training is also integral to the efforts of the California-based firm CyArk, which has worked with government and non-government groups to train 15 staff from Syria as part of Project Anqa, an emergency

documentation initiative focused on at-risk heritage sites in the Middle East and North Africa. Since the project's launch in 2015, Iraq's famous Ziggurat of Ur and two sites in Damascus—the Bimaristan Nur al-Din and the Madrasa al-Jakmakiya—have been recorded using light detection and ranging technology. A CyArk spokeswoman says that, after training, the Syrian teams were able to record the two sites “in a matter of months, despite the constant physical and political challenges they face in doing so”.

Adam Lowe, the director and founder of Factum Arte, says that while technology can “transform how we understand cultural heritage by bringing out the dynamic nature of objects” and laying bare details suggesting how they have been cared for over the years, it must be interpreted by those who understand what they are looking at. “Doctors interpret scans, they don't take them. We need connoisseurs to read the data.”

Emily Sharpe



MELISSA CHIU

DIRECTOR, THE HIRSHHORN MUSEUM, WASHINGTON, DC

2016 has been a momentous year for the art world. In June, I had the privilege of attending the opening of the new Tate Modern and the rehanging of their permanent collection, which now comprises works by over 300 artists from more than 50 countries, signifying an important shift in recognising an increasing number of international and emerging artists as part of the canon. Another highlight was Theaster Gates's immersive solo exhibition *How to Build a House* Museum at the Art Gallery of Ontario. Theaster's unique practice, which engages social justice and urbanism as artistic modes, transforms cultural narratives by reinvigorating and recontextualising historically disenfranchised spaces. Theaster joined the Hirshhorn's board as an artist trustee last fall, and we are very proud to have his guidance and expertise as a part of our institution.



FRANCIS OUTRED

POST-WAR AND CONTEMPORARY, CHRISTIE'S

A standout moment for me in 2016 was the opening of San Francisco Museum of Modern Art, a building constructed with the primary purpose of looking at art, a rare thing in today's museum world. It more than delivers on that promise not only in the fabric of the building but also the quality of work. The superlative Fisher Collection as well as gifts from over 200 global collectors have created an institution that rivals the best in the world. This was just one of the many things that stood out from an inspiring trip to the West Coast of the US that I took in the spring of this year. Other highlights included San Francisco's burgeoning art scene as well as witnessing the continued evolution of LA as an art capital with the Broad, Hauser & Wirth's new gallery, and the proliferation of artist studios—all of which are recreating the art landscape on the West Coast right now. While there I also had the distinct honour of dining in John Lautner's Chemosphere, one of the great mid-century buildings.



NAZY VASSEGH

CHIEF EXECUTIVE, MASTERPIECE, LONDON

Masterpiece 2016 took place a few days after Brexit. At the time I remember wondering whether anyone would come and was particularly nervous about how the uncertainty might impact the success of the fair. I needn't have worried—in fact, in many cases it had a surprisingly positive impact. Collectors acquired works far more quickly than in previous years, encouraged by the exchange rate, and exhibitors reported strong sales within hours of opening. Thinking about this rationally, I believe that in times of turmoil in the financial markets collectors are often drawn to more tangible assets, as presented at Masterpiece.



LUCY MITCHELL-INNES

PRINCIPAL, CO-OWNER, MITCHELL-INNES & NASH, NEW YORK

Two memorable events come to mind in thinking about 2016. The first is Pope.L's performance *The Problem* at Art Basel in June. The performance culminated with its protagonist, a huge white gorilla, finding thousands of euros tucked away behind Pope.L's paintings on view at Art Basel. The gorilla stuffed the cash into a big bag and ran off. The second is the Abstract Expressionism show at the Royal Academy in London. I made a dedicated trip to London to see the show, and it was absolutely worth it.

• To read the responses in full, visit theartnewspaper.com

ART

Perhaps the most apt exhibition title of the year was that given by Jochen Volz to his São Paulo biennial: *Live Uncertainty*. These are indeed uncertain times geopolitically, not least in Brazil, but also in terms of the direction of art. While the Venice Biennale of 2013 prompted noticeable shifts, including a greater attention to so-called Outsider Art, the ripples of the 2015 edition have been less noticeable, perhaps because Okwui Enwezor's politically dominated show had arguably been anticipated by numerous exhibitions, including some of Enwezor's own, over many years. Next year might mark a new shift, since it is that once-in-a-decade occurrence in which the Venice Biennale, Documenta in Kassel and Kasper König's Skulptur Projekte Münster coincide. Still, there have been some clear trends and noticeable developments in 2016.

CLAY GETS DAY IN THE SUN

The return of ceramics to the mainstream of contemporary art has been a slow but compelling process, and in 2016, it felt a more ubiquitous medium than ever. Young artists such as Aaron Angell and Jesse Wine have brought irreverent energy to the table, while Betty Woodman, Ron Nagle and other relative veterans are more visible and influential than ever. In a discussion on *Frieze.com*, Angell suggests that the rise of clay is in part “a reaction against the kind of fabrication fetish that we have been seeing in a lot of work over recent years”, a return to the intimacy of art making after years in which growing numbers of artists outsourced their work, a process in which artists lost “this one-to-one scale of body to material which is so inherent to clay”.

VIRTUAL REALITY

In a feature in *The Art Newspaper* in October, we reported that there are still many questions about how museums, galleries and collectors should deal with the increasing abundance of digital art. They will need to move quickly: if

The year in art: uncertain times



A highlight of The Infinite Mix show: Dominique Gonzalez-Foerster's 2016 video OPERA (QM.15)

“The most insurgent painting for this moment must be of figures, and those figures must be black”

ceramics offer artists an intimate and immediate form of expression, so too do the digital tools available to them, including, for the first time, affordable virtual reality (VR) headsets such as the Oculus Rift.

VR is a growing presence in major galleries, and artists working predominantly in digital are beginning to dominate programming at major international spaces, from the New Museum in New York to the Tate's galleries in Britain. The Berlin Biennale, too, reflected this digital surge, although it received mixed reviews.

GREATEST LIVING PAINTER?

In a depressing American news cycle dominated by the racist rhetoric of Donald Trump, repeated police brutal-

ity to people of colour and the resulting Black Lives Matter movement, no painter's work feels more vital or more urgent than Kerry James Marshall's.

In an essay for his hugely acclaimed exhibition *Mastery*, which opened at the Museum of Contemporary Art Chicago this summer before travelling to its current incarnation at the Met Breuer in New York, after which it will open at the Museum of Contemporary Art, Los Angeles, Marshall writes: “I am trying to establish a phenomenal presence that is unequivocally black and beautiful. It is my conviction that the most instrumental, insurgent painting for this moment must be of figures, and those figures must be black, unapologetically so.”

INFINITE POSSIBILITIES

Two of London's best shows this year reflected the enduring potential and the increasing variety of video art, flying in the face of those who dismiss video as the exclusive preserve of a dry curatorial echo chamber.

Surveys of video art can be problematic, since they invariably demand too much of an audience's time if they are to be properly seen. But *The Infinite Mix*, a Hayward Gallery offsite project, made a good case for video being the most creative of all 21st-century media, with mostly short but punch-packing works from artists working in Europe and North America, all linked by their use of music.

Meanwhile, the Barbican's retrospective of the Icelandic artist Ragnar Kjartansson, including his nine-screen masterpiece *The Visitors* (2012), was one of the most critically acclaimed, spellbinding and publicly adored shows of the year.

Ben Luke