Raphael Cartoons are ready for their close-up at V&A

High-resolution scans of Renaissance treasures go online, revealing fine details of the master's creative process

**ART & TECHNOLOGY**

By Hannah McGivern

LONDON, Raphael's seven surviving tapestry car-
toons for the Sistine Chapel were photographed for the first time in 1598. Lowered from a window of Hampton Court Palace, where they had been on and off display for more than 150 years, the Raphael Car-
toons (1510-16) were documented by daylight on glass plate negatives over several months. The delicate task was commissioned by Prince Albert, whose

passions for Raphael and photography led him to

a study of many of his works. The master's works.

In August and September 2019, the cartoons were

recorded once again with cutting-edge technology,

time with high-resolution colour photography, infrared and 3D scanning. Factum Foundation led the five-week project behind the closed doors of the Raphael Court at the Victoria and Albert Museum (V&A) in London – home to the cartoons since Queen Victoria decided to lend them in memory of her husband. It was “like a military operation,” says

Factum’s founder, Adam Lowe, as the recording had

to be coordinated with V&A conservators ensuring

checking conditions and Mozart technicians removing the vast glass frames from two cartoons at a time. The first presentation image will be available to browse online as part of the muse-

um’s new digital interpretation of the cartoons, designed by Spiral Productions. A host of digital fea-
tures will launch on 16 November, coinciding with the reopening of the Raphael Court, in honour of the 500th anniversary of the artist’s death. A nine-month refurbishment has made the car-
toons “more visible and legible” in the gallery, says the project’s curator, Ana Debedeniotti, with a deep blue wall colour to enhance Raphael’s “beautiful palette” and new LED lighting to minimise reflec-
tions on the glass. “It was about time,” she re-
duces, the says. The old lighting was installed during a 1966 renovation and had gone out of production, making it impossible to replace broken bulbs.

Hung on high and behind glass, Raphael’s scenes from the lives of saints Peter and Paul can neverethe-

less be hard to see. But gallery visitors will be able to use QR codes with their smartphones to access an “incredible level of detail” in Factum’s images of and beneath the painted surface, Debedeniotti says. A digital feature exploring the 16th-century creative process will allow users to “zoom to see the plasters”, revealing how the tapestry designs were transformed to a duplicate set of templates for Peter van Ael’s weaving workshop in Brussels.

Factum provided the V&A with its online browser,

vistualise the colour, infrared and 3D layers of the cartoons. The technology lays bare the “dramatic” nature of the works, Lowe says, which “will make a James Bond film look flat”. Each cartoon measures roughly 5m by 3.5m, made up of around 300 sheets of paper glued together. The 3D scans of the collaged surtouts “take you back 500 years, when the last person to see that was Raphael and his team of apprentices”, Debedeniotti says. “Emotionally, it’s something we’ve never been able to offer visitors before.”

Raphael’s large studio worked fast to create the series of ten cartoons (three had been lost by the time they came to England in 1632) in just 18 months. Factum’s greyscale infrared images show preparatory drawings in black chalk on charcoal that are not visible to the naked eye, including the pen-
timent when, for instance, a hand was placed in different positions before being finalised, and “the typical flurry of lines of Raphael’s graphic style”, Debedeniotti says. “You will be able to observe the artist at work, building up the picture.”

Other interactive smartphone features include a timeline of the cartoons’ history, a “spot the dif-
ference” game for families to compare the cartoons with the Vatican tapestries, and explanations of how religious iconography – intended to affirm the lead-
ership of the pope as heir to Peter and Paul, the

founders of the Catholic Church. Debedeniotti hopes that mobile access will transform how the visitors engage with the cartoons in the gallery. “The public is eager for more inter-
action,” she says. “The only way was to provide a digital offer that would guide you to go back and forth between the information and the work itself.” Some of the interpretation, including Factum’s browsers, will also be available to view on home computers via the V&A’s website.

Despite the age, fragility and consistent display of the cartoons, conservators found them to be in “amazing condition” last summer, Debedeniotti says. However, she acknowledges that they “might not survive forever, so it’s one duty to record them in the best possible way.”

Factum’s digital archive offers a preservation tool for future generations. They also open up intriguing possibilities for the public. “It’s very affordable to travel. With permission from the V&A and the Royal Collection Trust, Factum 3D-printed a facsimile of one cartoon. The Savoy of Venice, for the major Raphael exhibition held in Rome earlier this year. The technology represents a “new kind of sharing”, Lowe says, “for people all over the world to see these paintings”.

Maeght Foundation’s Miró Labyrinth meanders towards full restoration

By Georgina Adam

ST-PAU-DE-VENCE, The Maeght Foundation is one of the south of France’s most famous art desti-
nations: built by the dealers Marguerite and Aimé Maeght in 1964, it was the country’s first private museum and houses a premier collection of Modern and Post-Modern art by Pierre Bonnard, Jean Miró and Alexander Calder, among others. A highlight is the Miró Labyrinth, conceived by the artist and the father-and-son Spanish cerami-
cists the Artigas, between 1963 and 1981. The ter-
raced labyrinth winds among pine trees in the

foundation’s grounds, dotted with 20 works of art in ceramic, marble, concrete and iron. But time has wearied its damage, both visible and structural. With 655,000 visitors from the friends of the foundation and other sources, specialist con-

servators completed the restoration of the 14 ceram-
ic in late September. The works were cleaned with bisocides, consolidated with acrylic resin, then

tinted with acrylic paint and finished with a poly-

urethane varnish. "The next phase is to restore the concrete and iron pieces, notably the arch and the pitchfork," says Anne Bourgeois, the foundation’s development director. This is planned to start in early 2021, supported by a new fundraising appeal via social media. The concrete arch will be cleaned to remove algae and treated with biodetergents before it is steem cleaned, says Bourgeois. The coating on the iron and bronze pitchforks, which has dulled with age, will be replaced with a clear and matte finish, restoring the contrast between the two materials. A third metal work, fitess (saw/magnifying) (1973), has corroded because its base stands in water and has hot some of its thickness, endangering its stability. It will be measured with ultrasound before a rein-

forcement strategy is decided.

Further down the line are plans to conserve the foundation’s collection of 7,000 works on paper, including raw, large-scale Miro linographs made in the Maeght’s printing press, as well as gouaches, etchings and posters. However, "there is no ques-
tion" of touching the external Giacometti courtyard, featuring examples of the sculptor’s figure Marche and Grande Femme Debout. "Alberto Giacometti’s own wish was that they should remain like that, and weather over time," Bourgeois says. The foundation has no public funding for operating costs although it does receive donations. Last year, the Alps-Maritimes department funded the 450,000 euros restoration of the covered roofs of the iconic Joseph Luit Sert building. The foundation is providing 490,000 euros towards a three-year plan for the preservation and renewal of the pine trees, which are now 100 years old. The knobby divided Maeght property – Aimé and Marguerite’s son Adrien, whose children include Isabelle and Yves– have bankrolled the foundation in the past. Now the Covid-19 crisis has hit hard, since 70% of income comes from ticket sales. "While we saw a notable increase in visitors in July and August, September to December are likely to be very difficult, as a lot of our tourism is foreign and they can’t travel at the moment," says Bourgeois. However, an international council was recently established to bolster support for the foundation.