Royal Academy of Arts presents "The Veronica Scanner: Live 3D Portraiture"

The Veronica Scanner: Live 3D Portraiture is the result of a partnership between Factum Foundation, the Rothschild Foundation and the Royal Academy of Arts.

LONDON.- The Royal Academy of Arts in partnership with Factum Foundation for Digital Technology in Conservation and the Rothschild Foundation will present The Veronica Scanner: Live 3D Portraiture to UK audiences for ten days only in London, from 2 – 11 September 2016, and Waddesdon Manor in Buckinghamshire from 22 – 30 October 2016.

During this experiment, visitors will not only be able to watch as members of the public are scanned, processed, printed and carved into three-dimensional portrait busts in real time, but they will also have the opportunity to book a place to have their own digital portrait scan taken by the innovative Veronica Scanner. From Pygmalion falling for his own sculpture in Greek mythology to the rise of photography in the nineteenth century as a new way to record facial features, visual art has always sought to reproduce a true likeness between image and form. This new interactive project at the RA celebrates the next stage in this story, the art of 3D photogrammetry in the twenty-first century.

The Veronica Chorographic Scanner, designed by contemporary artist Manuel Franquelo Giner, and built by Factum Arte, is a bespoke 3D head scanner showcasing the emerging technologies behind high-resolution composite photography and photogrammetry. Vera translates as 'true', from Latin and Eikōn means 'icon' or 'image', from Greek, resulting in the name 'Veronica'. Using eight cameras to record a complete head within

a 50 x 50 x 50cm range, the Scanner is designed to capture and map the fine surface detail of the human face. This results in 96 high-resolution photographs of the subject from every angle which can then be processed into a digital 3D model. The machine takes 4 seconds to complete the recording and, whilst on display, will scan 40 people per day. The resulting images can then be rematerialised as a physical bust through 3D printing and CNC milling. As part of the project, a highly specialised robot, lent from the Bartlett School of Architecture (University College London), will carve one of the 40 scans a day into a wooden bust. A group of 3D printers, provided by iMakr, will also print busts in real time and data processing and 3D modelling will be done on site. As the 3D models are processed, they will be uploaded to an online virtual gallery which will be accessible to the public.

Visitors who wish to be scanned will need to pre-book their scanning appointment. In the following days they will receive an electronic file containing their 3D portrait. The Veronica Scanner: Live 3D Portraiture will be open to members of the public who can view the portraiture live in action, as well as the additional display of a series of other bust sculptures which the scanner has created, alongside complementary material and texts tracing the development and possibilities of photogography as a tool for sculpture. The project space has been designed by RIBA award-winning architect, Charlotte Skene Catling of Skene Catling de la Peña.

Recent projects produced by Factum Foundation include a scan of Tutankhamun's tomb in Luxor, Egypt, a re-materialised copy of Caravaggio's Nativity with Saint Francis and Saint Lawrence in Palermo, Italy and other cultural heritage recordings in Daghestan, Jordan, Lebanon, England, USA, France and Italy. Factum Arte, the workshop in Madrid from which the Foundation emerged, have worked with a number of artists including Royal Academicians Anish Kapoor, Grayson Perry, Conrad Shawcross and Gillian Wearing.

The Veronica Scanner: Live 3D Portraiture will tour to Waddesdon Manor from Saturday 22 – Sunday 30 October 2016.

Tim Marlow, Artistic Director at the Royal Academy of Arts, said: 'The relationship between art and technology is a long, complex and fruitful one. We are delighted to be collaborating with Waddesdon Manor and Factum Foundation on such a visionary project.'

Lord Rothschild, Chairman of the Rothschild Foundation, which manages Waddesdon Manor, said: 'We are very pleased to be collaborating with the Royal Academy and Factum Foundation on this innovative project, which explores the most cutting-edge new technology and its application in art and conservation. We are particularly excited to host the Veronica Scanner at Waddesdon, a house renowned for portraits and exceptional craftsmanship – both of which are celebrated through this exhibition.'

Adam Lowe, Director at Factum Arte, said: ''We think of photographs as images but this odyssey into 3D portraiture demonstrates that they can also be sculptures. The dream of the Greek sculptors was to create a realism that went beyond subjective interpretation. The Veronica Scanner was originally developed for use with anti-ageing treatments but it is finding its application in portraiture and conservation. In this experimental workshop we will push its capabilities to the limit and build bridges between 3D recording and the emerging world of 3D output - both additive and subtractive. We are thrilled that both the RA and the Rothschild Foundation have reacted so quickly to bring this emerging technology to the public in a spirit of experimentation and curiosity.'