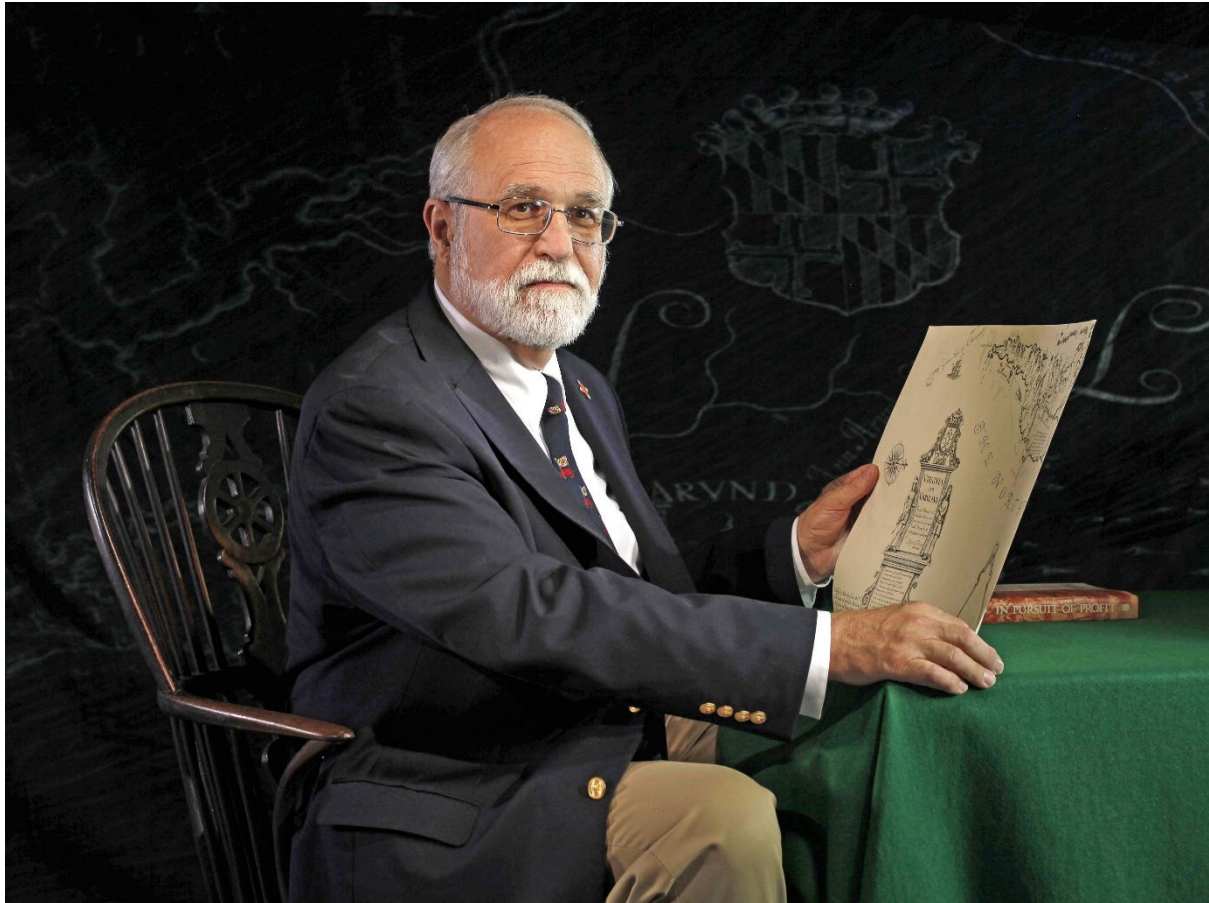


3D lenticular portrait of Dr Edward Papenfuse by Rob Munday, 2013

'I have never seen such a compelling portrait before, one that so captivates and engages the viewer through its depth and interactivity'

- Alexandra Deutch, curator of the Maryland Historical Society and curator of the second-largest collection of presidential portraits in the USA.



Having seen my 3D portrait of Queen Elizabeth II, created in 2003/2004 for the Jersey Heritage Trust/The States of Jersey, The Maryland State Archives commissioned me to shoot and create a lenticular portrait to commemorate the life and career of Dr Edward Papenfuse. Dr Edward Papenfuse worked as the Maryland State Archivist for 38 years and pioneered the digital archiving of historical documents.

The brief was to create a state-of-the-art 3D/holographic portrait in the visual style of 18th-century portrait painters, particularly those of Maryland's own Charles Wilson Peale, best known for his portraits of George Washington.

During initial discussions with Dr Papenfuse, he expressed a desire to be sitting on a Windsor chair. Such chairs were commonly made in the USA between 1725 and 1860 and were famously owned by each of the Founding Fathers. With this in mind, I composed the background, chair, table, and sitter. The position of Dr Papenfuse was also carefully chosen to accentuate the three-dimensionality of the portrait whilst retaining sharp focus on the most important aspects of the scene.

Taking full advantage of the unique animation capabilities of the lenticular imaging medium, I decided to create "two portraits in one". When the portrait is viewed from the left-hand side, the sitter is seen holding and pondering a historical map of Maryland. As the viewer moves from left to right, the map transforms into an iPad, which shows the same map now in digital form, and the sitter is seen looking forward as if to the future.

This device powerfully conveys the significant achievements of Dr Papenfuse as an eminent Maryland historian, particularly his pioneering development of digital archiving. I have portrayed Dr Papenfuse in a stately fashion that is respectful of his position as the Maryland State Archivist and Commissioner of Land Patents for almost 40 years, whilst also expressing his interest in modern imaging, storage, and communication technologies.

The portrait also follows the style of my other portraits, such as that of Queen Elizabeth II, in that it presents a true, spatially realistic, life-like rendition of the sitter.

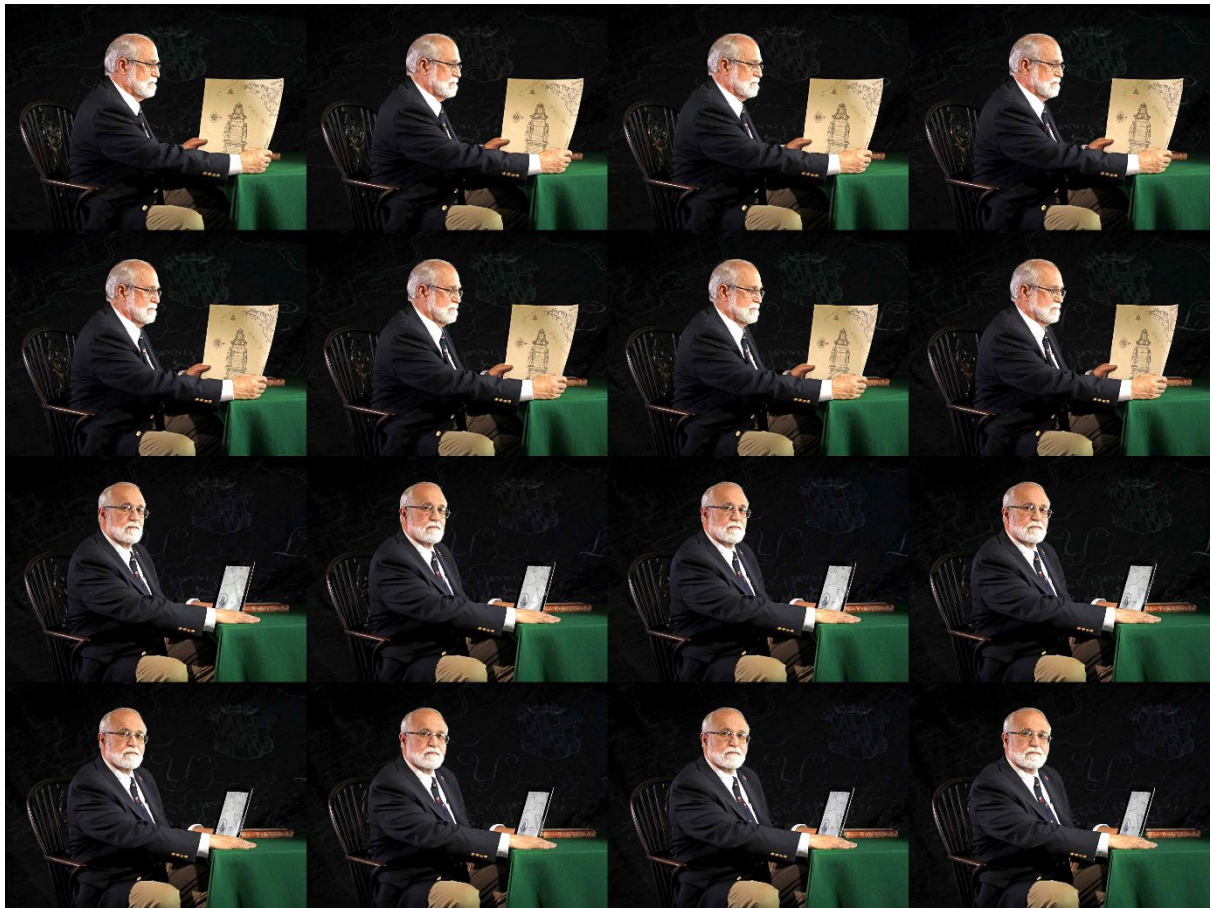
I shot the portrait at Halliford Film Studios, Shepperton, in 2013, utilising my specially designed 3D camera that I had originally designed and built to shoot Queen Elizabeth II's portrait in 2003/2004.



Rob Munday in mid-shoot, with Dr Edward Papenfuse, at Halliford Film Studios

Ten parallax image sequences were recorded, each containing between 94 and 134 images, taken through an angle of approximately thirty degrees.

After the shoot, I selected one sequence of Edward Papenfuse holding the map and another of him holding the iPad. These two sequences were merged by combining the first half of one with the second half of the other. After post-processing and distortion removal, the merged sequence was interlaced to create a single image and printed onto Fujitrans Crystal Archive photographic transparency film using a modified Océ LightJet printer. This chromogenic print was then laminated to the back of a UV resin/glass lenticular lens using an optically clear acrylic adhesive, in perfect register. The completed lenticular work was then mounted onto the front of an 8 mm-thick LED light panel and framed behind a 4 mm-thick, anti-reflection-coated acrylic cover sheet for UV light protection.



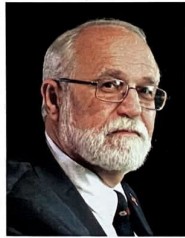
A selection of images from the final sequence that was used to create the lenticular portrait.



The Maryland State Archives curators take delivery of the final work..

The resultant 48 * 36-inch 3D and animated glass lenticular portrait was unveiled on the 5th of June 2014 at the Maryland Historical Society, Baltimore. It was hung next to the work of two of America's most acclaimed portrait painters, Gilbert Stuart and Charles Wilson Peale.

The Friends of the Maryland State Archives
Invite you to the
Unveiling of the Portrait of
Dr. Edward C. Papenfuse
Retired State Archivist



At The Maryland Historical Society
Thursday, June 5, 2014
5:00 – 7:00 pm

201 W Monument Street
Baltimore, MD 21201

RSVP by May 30
Mimi Calver 410.260.6444
mimi.calver@maryland.gov

Portrait of Dr. Edward C. Papenfuse

The portrait to be unveiled on June 5 is a 3D/holographic portrait in the style of traditional 18th century portraiture. The state-of-the-art lenticular medium of the portrait is designed to pay tribute to Dr. Papenfuse's achievements as a distinguished historian, as well as his pioneering development of digital archiving.

Rob Munday

The portrait of Dr. Papenfuse was created by Rob Munday, who is recognized as one of the foremost holographers in the world. Working as both an artist and a technical innovator, he has recorded many unique holograms. In 2003, he was commissioned to produce the first official holographic portrait of Her Majesty the Queen and subsequently created the world's first holographic postage stamp that depicts a 3D portrait of a Head of State for the Island of Jersey.

Mr. Munday works from his studio near London, England and will be present at the unveiling of Dr. Papenfuse's portrait.



Rob Munday's portrait hangs in the Maryland Historical Society, Baltimore, USA.

MARYLAND STATE ARCHIVES

Hon. Martin O'Malley
Governor
Hon. Anthony G. Brown
Lt. Governor
Timothy D. Baker
Acting State Archivist
Matthew P. Lalumia
Chairman, Maryland Commission on Artistic Property



Hall of Records Commission:
Hon. Mary Ellen Barbera, *Chair*
Chief Judge, Court of Appeals
Alvin C. Collins
Ronald Daniels
Hon. Peter V. R. Franchot
William E. Kirwan, Ph.D.
Hon. Nancy K. Kopp
Burton K. Kummerow
Hon. Thomas V. Mike Miller, Jr.
Christopher B. Nelson
Del. Samuel I. Rosenberg
David Wilson, Ed.D.

Contact: Mimi Calver 410.260.6444
Mimi.calver@maryland.gov

First American Portrait by Famed British Holographer and Artist, Rob Munday, To be Unveiled in Baltimore

Annapolis, MD, May 27, 2014 --- **On June 5, the Maryland State Archives will unveil the first portrait in the United States by famed British holographer and portrait artist Rob Munday.** Mr. Munday is renowned in Europe for his extremely high quality 3D holographic and lenticular portraits, including a portrait of Her Majesty Queen Elizabeth II that was commissioned by the States of Jersey in 2004. His portrait of the Queen was featured on the front cover of TIME Magazine in 2012 and is currently on display at the National Portrait Gallery in London where it is part of its collection.

The portrait of Dr. Edward C. Papenfuse is a 3D lenticular photograph and was recorded by Mr. Munday at Shepperton Film Studios just outside of London, England. Munday's large format 3D portraiture is the state-of-the-art and unlike anything being done elsewhere in the world. Taking full advantage of the unique animation capabilities of the lenticular imaging medium, he created "two portraits in one." When viewed from the left, the sitter is seen holding and pondering an historical map of Maryland. When viewed from the right, the map transforms into an iPad with the map shown in its digital form and the sitter is seen to be looking forwards as if to the future. The map image in the portrait is a cartouche from the 1670 Augustine Herrman map of Maryland and Virginia, the first accurate map of the Chesapeake Bay.

This device powerfully conveys Mr Papenfuse's significant achievements as an eminent Maryland historian and in particular his pioneering development of digital archiving. Munday has portrayed Dr Papenfuse in a stately fashion that is both respectful of his position as the Maryland State Archivist and Commissioner of Land Patents for almost 40 years, whilst also expressing his interest in modern imaging, storage and communication technologies.

The portrait also follows the style of Munday's other portraits, such as that of Queen Elizabeth II, in that it presents a true, spatially realistic and life-like rendition of the sitter.

Edward C. Papenfuse retired on November 1, 2013 after 38 years as Maryland state archivist.

The portrait unveiling will be held at the Maryland Historical Society on June 5, from 5 – 7 pm. The portrait will be installed permanently in the State Archives building in Annapolis in October.

Rob Munday will attend the unveiling and is happy to conduct interviews. He will also show a small version of his now famous portrait of Queen Elizabeth II.

The acceptance speech of Dr Edward Papenfuse

This is one of those few occasions when I really don't know what to say. Fortunately, I do not have the same internal reaction that Churchill had when he saw his portrait by Sutherland unveiled in the House of Commons in 1954. I like Rob Munday's portrait of me and am greatly flattered by it. When the Churchill portrait was unveiled, what Churchill said at the time is actually appropriate for Rob Munday's portrait of me.

The portrait is a remarkable example of modern art. It certainly combines force and candour. These are qualities which no ...[one in public life] ... can do without or should fear to meet.

The kindness with which Rob Munday's lens captures me is both complimentary and projects what I had hoped it would: *My love of the details that make Archives so essential to better understanding ourselves and our world.*

I chose Augustine Herrman's map of Maryland for many reasons, but the most important are that it represents a critical archival source for Maryland's history that Marylanders do not own, yet is essential to understanding its history. I tell its story in part in the *Atlas* that Joe Coale and I produced.

As the most important map of the face of Maryland in the colonies' formative years (published in 1671), Herrman's map provides insight into the ways and manner that the residents of Maryland deployed themselves on the land. I chose the word 'residents' carefully, as Augustine Herrman was not yet a citizen of Maryland when he began his map, but was an immigrant from what is today a region north of Prague, in the Czech Republic, by way of Holland and New Holland. His map has a degree of accuracy to it that made it possible for me to superimpose a small section of it on Google Earth, revealing a native American village that happened to be only recently discovered in an archaeological dig. It is also symbolic of the essential role that immigrants played throughout the course of Maryland's history.

When I came to the Maryland Archives in 1973, I was an Ohio transplant. I learned much later that my great-grandparents had tried to immigrate through the port of Baltimore in the 1880s, but their ship was quarantined and turned back, only to have them try again successfully through the port of New York the next year on their journey to a new life in the Midwest. Over the years, as Archivist, I came to realize that the task before me was to save as much as I could of the memory of those immigrants and natives who both made Maryland and passed through to other parts of our great country. If I have a legacy for the people of Maryland, it is this determined effort to make the Maryland Archives into an authoritative on line source of the collective memories of its residents through time, taking the internet in a box that our neighbor Kenny Karpay introduced me to, and making it the portal through which we can both find and explain that archival heritage.

Through good records description, biographies of public officials and those in the society who labored to make Maryland, including the immigrants, both slave and free who toiled on the land and in the industries of the city, and emphasis on appropriate conservation of the surviving evidence, both artifact and electronic, I hope I have made a dent in what we should be doing to preserve and access our collective memory.

It is my hope that this portrait will remind people of the goals of that legacy, rather than the individual sitting there holding Augustine Herrman's map (a copy, by the way, not an original) and viewing it on my IPAD.

In closing, I can't say enough about how much I appreciate all the hard work that went into this unveiling. First and foremost, I want to thank the Friends of the Maryland State Archives for commissioning and paying for this portrait. It is a maintenance-free contribution to the State's art collection. In addition, the artistic care without license that Rob Munday put into this innovative modern art rendition of me and the map, the organizational skills and devotion that Mimi Calver provided for tonight's reception, and the ongoing support from Sallie, David, Eric, Cathy, Clara, Everett, Chauncey, Tim, Elaine, Chris, Burt, and all our friends is simply overwhelming.

Nearly hidden to the right of the map and IPAD is a copy of *In Pursuit of Profit*, my first effort at writing a book. What I have discovered over the years that the *Pursuit of Archives* yields its profit in the those who have been so supportive throughout my public and private life.

To all of you I raise my glass and read a blessing from a psalm book printed and published in Baltimore in 1814:
It is from Lord Baltimore's favorite psalm which is excerpted on the great seal of Maryland and calls upon the Lord :
For, Lord, unto the righteous ... thou wilt thy blessing yield with favor thou wilt compass ...about as with a shield
Thank you,
Ed Papenfuse
2014/06/05

The portrait is now permanently installed within the Maryland State Archives' Edward Papenfuse Building in Annapolis, USA.

Technical process:

1. Firstly, two 'parallax image sequences' each consisting of 135 digital images were shot through an angle of 45 degrees using a high-resolution Canon 5D Mark II digital stills camera and a specialised motion control system called the VIP system, originally developed by me to record my portrait of Her Majesty the Queen in 2003/2004.
2. The two parallax image sequences were then combined to make one 'two-channel' sequence, which first shows Dr Ed Papenfuse holding the map and then shows him holding the IPAD.
3. This new sequence was then digitally manipulated using a computer and specialised software to remove all the distortions inherent in 'parallax image sequences'. Such image correction is necessary to provide a stereoscopically accurate 3D image which is easy to view, does not swing as the viewer moves, and looks proportionally correct in all three dimensions. This correction software was written especially by me.
4. The corrected frame sequence was then 'interlaced' to produce a single image that amalgamates all 135 frames.
5. This single frame was digitally printed using a specially modified Océ LightJet printer onto Fujitrans Crystal Archive photographic transparency film at high resolution. The resultant photographic print is also called a digitally produced 'chromogenic' print.
6. A glass lenticular lens was then made by laminating a lenticular lens, in this case an acrylic (polymethyl methacrylate) 20 lenses per inch 3D lens, to the front of a special sheet of super flat optically clear glass (with a low iron content) using an optically clear acrylic adhesive.
7. The chromogenic print was then laminated, also using an optically clear acrylic adhesive, to the back of the glass lenticular lens in perfect register. The print and lens have to be registered to each other with an accuracy of at least 0.002 inch (0.042 mm) over the entire area (48 * 36 inches).
8. The final lenticular print was then mounted onto a slim, low-voltage LED light panel and framed. A protective sheet of Optium Museum Acrylic made by Tru View Inc. was placed on top. This has both UV light blocking and antireflection coatings to ensure the archival longevity of the lenticular print.

Credits:

Concept, design, art direction, and 3D photographic shoot: Rob Munday

Lighting Director:

Giles Christopher, Media Wisdom

Studio Production:

Abigail Cockcroft, Media Wisdom

Production of lenticular print:

Jake Purches, Base2 Studio

Studio:

Halliford Film Studios, Shepperton

Footnote:

While shooting Dr. Edward Papenfuse's portrait at Halliford Studios, I had set up another shoot in a different part of the studio, this time for the world-famous rock band The Who. This shoot involved creating a 3D lenticular image of one of the most famous drum kits in the world, Pictures of Lily, the kit of the Who's former iconic drummer, the late Keith Moon. Upon seeing the drum kit set up in the corner of the studio, Ed asked if he could have his picture taken behind this iconic kit, as if he were playing it, and I was happy to oblige.





*A 3D anaglyphic version of a second version of Rob Munday's portrait of Dr Edward Papenfuss.
Use red/cyan stereoscopic glasses to view the image in 3D.*