

# ReACH

Reproduction of Art and Cultural Heritage



V&A

in partnership with

peri

Ziyavudin Magomedov  
Charitable Foundation



## Foreword

The V&A's founding director, Henry Cole, showed great foresight with his 1867 Convention calling for the 'mutual exchange of copies'. Plaster casts, electrotypes and photographs were shared across European collections for widespread educational benefit.

One hundred and fifty years later, and in the face of Isis-inspired iconoclasm and increasingly destructive pollution, we initiated ReACH: our 21st century response. This global initiative on the Reproduction of Art and Cultural Heritage, has been spearheaded by the V&A, in partnership with the Peri Foundation. It has brought together the global museum and heritage community to explore how our imperilled cultural heritage can be preserved in our digital era of 3D printing, ultra-high resolution and drone technology, and to debate the creative opportunities that copying these works offers a global audience.

With each discussion we came closer to redrafting Cole's Convention. And with this concluding event, we present ReACH's lasting legacy: a 21st century blueprint for navigating the future role of reproductions, available to everyone who has a stake in our cultural heritage.

ReACH has been a significant and timely reminder of the shared links between our cultures, their interconnected values, and the collective responsibility we all have towards them. Thank you to the Peri Foundation without whom this initiative would not have been possible. A special thank you also to the Smithsonian Institution, The State Hermitage Museum, the Abu Dhabi Department of Culture and Tourism and the Louvre Abu Dhabi, and the Palace Museum for their wonderful collaboration in hosting the ReACH roundtables. Finally, thank you to the experts who joined the ReACH dialogue and contributed.

**Dr. Tristram Hunt**  
Director  
Victoria and Albert Museum

When I set up the Peri Charitable Foundation I wanted to promote education, latest technologies and culture. I see our partnership with the V&A in the ReACH project as being in line with these goals. Peri Foundation is involved in a number of significant projects keeping cultural heritage alive using the latest technologies and educating young people in their use and importance.

The digitization of cultural and historic artefacts can substantially add to the level of interest among young people and the ReACH project can become an important step in the increase of accessibility to cultural heritage for everyone. ReACH is a very timely initiative. It does not only address the increasing dangers for cultural heritage presented by terrorism, climatic changes and massive tourism, it also draws the attention of the international community to the great opportunities which new technologies provide to making cultural experience more interactive and meaningful. It contributes to an enrichment of the cultural and scholarly inheritance of all humanity.

**Ziyavudin Magomedov**  
Founder  
Peri Charitable Foundation



The interior of the Hermitage of San Baudelio de Berlanga, Soria, Spain during the recording of the interior in 2016 (image © Factum Foundation)





A team from the Peri and Factum Foundations photograph Dionisy's frescoes at the Ferapontov Monastery, Russia (image © Peri Foundation)

## What is the ReACH project?

ReACH (Reproduction of Art and Cultural Heritage) is a global initiative spearheaded by the Victoria and Albert Museum in partnership with the Peri Foundation which explores how we can collectively re-think our approach to the reproduction, storage and sharing of works of art and cultural heritage in the twenty-first century.

### Why now?

Officially launched in Paris at UNESCO's headquarters in May 2017, the ReACH initiative coincides with the 150th anniversary of Henry Cole's 'Convention for Promoting Universally Reproductions of Works of Art', which helped usher in a period where museums engaged actively in the creation of reproductions of examples of great art and architecture from around the world making the most of the technological advances of the time.

In response to increasingly destructive forces such as pollution, terrorism, conflicts or mass tourism, the objective of ReACH is to take the opportunity of this anniversary to bring the global museum and heritage community together to explore collectively how our imperilled cultural heritage can be preserved, and to debate the creative opportunities that copying these works offers a global audience.

Today, digital technologies are changing the cultural landscape, offering new ways to produce, store and share museum and heritage assets. However, there is no clear methodology for how museums and heritage organisations should engage with these technologies. To complicate matters, legal protocols and procedures have not adapted to these new realities, and often act as roadblocks to new practice. The ambition with the ReACH initiative is to bring clarity – by highlighting best practices, debating pressing issues, and drafting a new declaration – and offer our community a useful roadmap for dealing with reproductions in the future.

### What has been achieved so far?

With the support of key research partners – Factum Arte, the Louvre Museum, the Smithsonian Institution, the State Hermitage Museum, the Vorderasiatisches Museum, the Warburg Institute and Yale Institute for the Preservation of Cultural Heritage – the core research activity took place between May and December 2017.

Through a series of five roundtable discussions – hosted in Washington DC with the Smithsonian Institution, in St Petersburg with the State Hermitage Museum, in Abu Dhabi with the Department of Culture and Tourism, in Beijing with the Palace Museum and in London at the V&A – we have drawn together experts from across the world (individuals as well as institutions, start-ups as well as public organisations, scholars, lawyers, curators and digital experts) and conducted an unprecedented global consultation, to broaden our collective knowledge, and to share this with others.

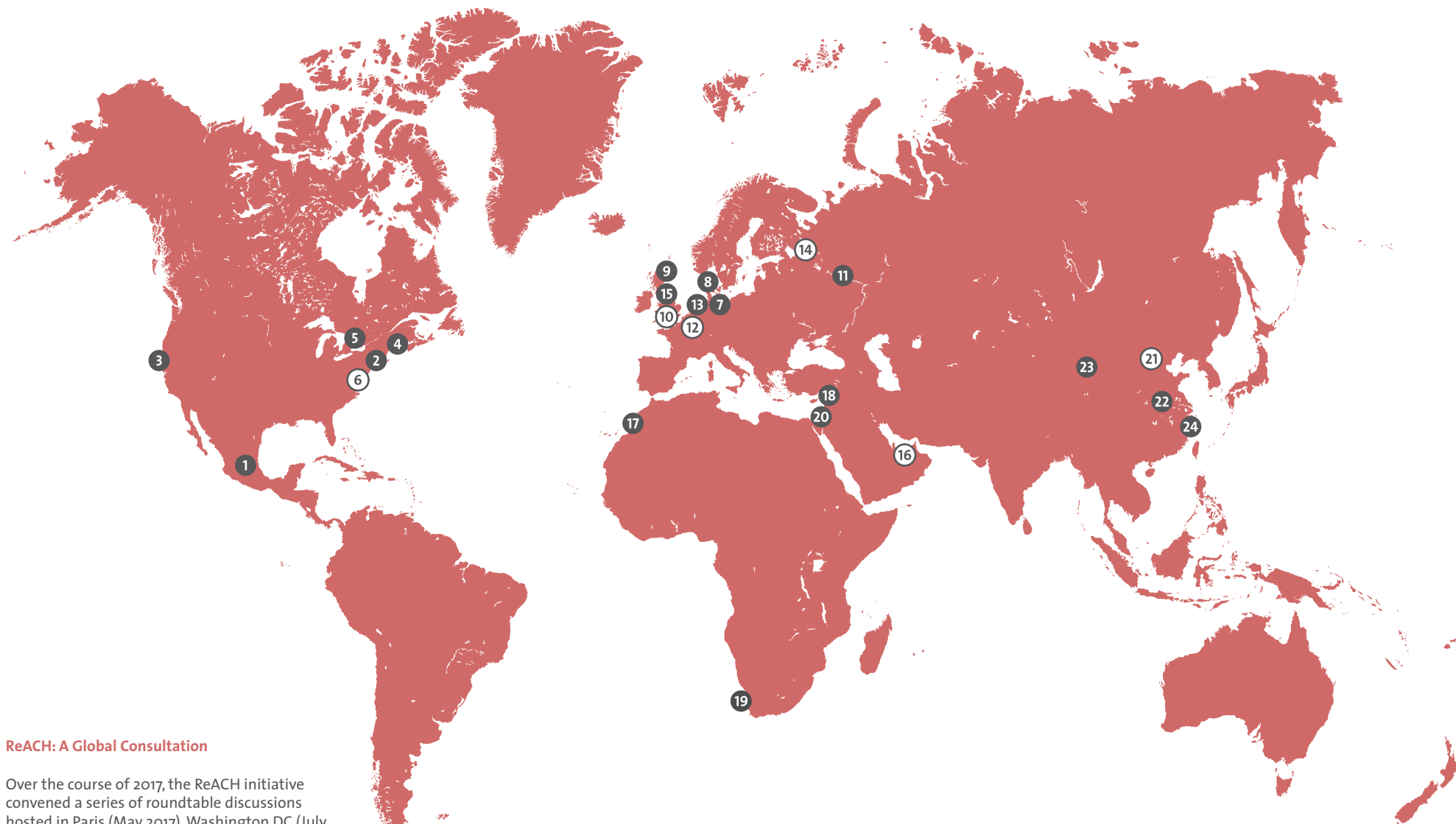
This has resulted in the production of the ReACH Declaration, a twenty-first century version of Henry Cole's Convention which invites us to embrace with confidence advances in technology and connectivity to better study, share and preserve our cultural heritage.

### What is coming up next?

The launch of the ReACH Declaration at the V&A on 8 December 2017 marks the beginning of a new phase of circulation and dissemination of this new text. We invite more people to join the initial signatories and pursue the ReACH dialogue opened last May. Indeed, what the past months have demonstrated is the new power of collaboration and the importance of working collaboratively to address those global issues that no individual or institution on its own could tackle.

Anaïs Aguerre  
ReACH Project Director

For more information: <https://www.vam.ac.uk/research/reach-reproduction-of-art-and-cultural-heritage>



## ReACH: A Global Consultation

Over the course of 2017, the ReACH initiative convened a series of roundtable discussions hosted in Paris (May 2017), Washington DC (July 2017), St Petersburg (September 2017), London (October 2017), Abu Dhabi (October 2017) and Beijing (November 2017). This enabled over 100 curators, conservators, museum directors, heritage experts, artists and lawyers, learning experts, digital experts, scholars from all over the world to join the ReACH dialogue which led to the production of the ReACH Declaration.

The map illustrates the reach of this consultation. We are keeping the ReACH dialogue open and invite you to join #ReACHDialogue

### North and South America:

1. Mexico City, Mexico
2. New York, USA
3. Oakland, California, USA
4. Salem, Massachusetts, USA
5. Toronto, Canada
6. Washington DC, USA

### Europe:

7. Berlin, Germany
8. Copenhagen, Denmark
9. Edinburgh, UK
10. London, UK
11. Moscow, Russia
12. Paris, France
13. Rotterdam, The Netherlands
14. Saint Petersburg, Russia
15. Oxford, UK

### Middle East and Africa:

16. Abu Dhabi, United Arab Emirates
17. Agadir, Morocco
18. Beirut, Lebanon
19. Capetown, South Africa
20. Irbid, Jordan

### Asia:

21. Beijing, China
22. Nanjing, China
23. Ningbo, China
24. Dunhuang, China



1867

### CONVENTION FOR PROMOTING UNIVERSALLY REPRODUCTIONS OF WORKS OF ART FOR THE BENEFIT OF MUSEUMS OF ALL COUNTRIES

Throughout the world every country possesses fine Historical Monuments of Art of its own, which can easily be reproduced by Casts, Electrotypes, Photographs, and other processes, without the slightest damage to the originals.

- (a) The knowledge of such monuments is necessary to the progress of Art, and the reproductions of them would be of a high value to all Museums for public instruction.
- (b) The commencement of a system of reproducing Works of Art has been made by the South Kensington Museum, and illustrations of it are now exhibited in the British Section of the Paris Exhibition, where may be seen specimens of French, Italian, Spanish, Portuguese, German, Swiss, Russian, Hindoo, Celtic and English Art.
- (c) The following outline of operation is suggested:

- I. Each Country to form its own Commission according to its own views, for obtaining such reproductions as it may desire for its own Museums.
- II. The Commissions of each Country to correspond with one another and send information of what reproductions each causes to be made, so that every Country, if disposed, may take advantage of the labours of other Countries at a moderate cost.
- III. Each Country to arrange for making exchanges of objects which it desires.
- IV. In order to promote the formation of the proposed Commissions in each Country and facilitate the making of the reproductions, the undersigned Members of the reigning families throughout Europe, meeting at the Paris Exhibition of 1867 have signified their approval of the plan, and their desire to promote the realisation of it.

GREAT BRITAIN AND IRELAND  
– Albert Edward, Prince of Wales  
– Alfred, Duke of Edinburgh

PRUSSIA  
– Frederick-William,  
Crown-Prince of Prussia

HESSE  
– Louis, Prince of Hesse

SAXONY  
– Albert, Prince Royal of Saxony

FRANCE  
– Prince Napoléon (Jérôme)

BELGIUM  
– Philippe, Comte de Flandre

RUSSIA  
– The Césarevitch  
– Nicolas, Duc de Leuchtenberg

SWEDEN AND NORWAY  
– Oscar, Prince of Sweden and Norway

ITALY  
– Humbert, Prince Royal of Italy  
– Amadeus, Duke of Aosta

AUSTRIA  
– Archduke Louis Charles of Austria  
– Archduke Rainier of Austria

DENMARK  
– Frederik, Crown Prince of Denmark

### VISION

This declaration promotes the vision that works of art and cultural heritage should be preserved and shared as widely as possible throughout the world.

Through advances in technology and connectivity, we now have a revolutionary opportunity to enhance learning, creativity and innovation, and to reach new audiences worldwide, through the reproduction and sharing of works of art and cultural heritage (“Works”). Furthermore, digital technologies can enable us to record, document and, in some instances, recreate Works that are threatened by environmental hazards, conflicts, terrorism, rapid economic development, mass tourism, thefts and other natural and human-made disasters (“Endangered Works”) or that have been lost.

For cultural institutions that hold collections for the benefit of the public, the opportunity to provide open access now or in the future to Works in a digital format is an exciting new frontier in their mission to preserve and transmit knowledge, culture and history for present and future generations. Such opportunities also present responsibilities. Digital Records need to be responsibly created and safeguarded for the long-term to ensure integrity as well as retrieval and reuse by future generations. Furthermore, as the means and skills required to use and access digital technology are not distributed evenly

around the world, it is incumbent on those with the capacity to do so to provide support and training to those with fewer resources.

This Declaration is intended for both institutions and individuals to promote the production, sharing and preservation of digital records and reproductions (“Records”). Owners and Stewards of Works and others involved in the process of generating these Records are encouraged to disseminate and use the ReACH Declaration as widely as possible.

The text herein is the result of an extensive global consultation on the occasion of the 150th anniversary of the 1867 Henry Cole Convention for Promoting Universally Reproduction of Works of Art for the Benefits of All Countries. The Convention, inspiring in its clarity, practicality and openness to the creation and sharing of reproductions, served as the basis for the establishment of this new ReACH Declaration.

The ReACH Declaration for Promoting Universally the Reproduction, Storage and Sharing of Works of Art and Cultural Heritage Through Digital Technology was adopted at the final ReACH roundtable held at the Victoria and Albert Museum in London on 8 December 2017.

### REPRODUCTION

Article 1 – Stewards of Works are encouraged, for the benefit of the public of today and future generations, to take advantage of technological advances to create Records of Works entrusted to their care, for purposes of documenting and preserving all Works but in particular Endangered Works.

Article 2 – Those involved in the process of documenting and producing digital Records are

encouraged to work to then - current accepted standards that will support academic study and monitoring the condition of the original object.

Article 3 – The process of documenting and producing Records should be non-invasive for the Works involved. The preservation of the Work itself remains of paramount importance. Digital Records are a tool that can support preservation but are not a substitute for preservation.

Article 4 – The process used to produce Records as well as the intended purpose for each specific Record should be documented to enable better usage and interpretation of such Records today and for future generations.

Article 5 – Before making and sharing Records, the historic context of and possible cultural and national sensitivities about the Works should be considered, as well as applicable legal and ethical constraints, and the rights of donors and third parties. Transparency and participation by communities or cultural groups with ties to the Works should be encouraged.

## STORAGE

Article 6 – Digital Records should be contemporaneously archived and maintained by the Steward of the Work. The Works should be recorded in a manner that renders them likely to be retrievable and reproducible even if technology changes. Enabling the data migration on a continuous basis is of paramount importance.

Article 7 – The Steward of the Work should own or, at a minimum, retain unrestricted and perpetual rights to use, reproduce and share the Records, unless applicable law or a contractual agreement requires otherwise.

Article 8 – Digital Records should be linked to metadata that enriches the digital asset for research, education and preservation.

Article 9 – Digital and Physical Records should be marked or otherwise identified as copies using methods that are sustainable and, to the extent feasible, do not rely on technologies that may become obsolete. Those involved in the process of making these Records are encouraged to develop an international system to identify copies.

## SHARING

Article 10 – Stewards of Works are encouraged to make Records freely available to the public for personal use and enjoyment and for non-commercial research, educational, scientific and scholarly uses.

Article 11 – Stewards of Works and other parties involved in the process of documenting and producing Records are encouraged to share those Records of Works as widely as possible, but in particular to reach new audiences, especially people with special needs. This includes, where possible, proactively addressing issues of equal access to digital technology on a global scale.

Article 12 – Stewards of Works and other parties involved in the process of documenting and producing Records of Works are encouraged to use established and standardized licensing schemes and symbols that convey to the public the manner in which the Records of Works may be shared and reused, including open access content.

Article 13 – When Records are shared and disseminated, Stewards of Works involved should provide attribution to the original author of the Works and, where practicable, provide credit to those involved in the process of documenting and producing Records of Works.

## COLLABORATIONS

Article 14 – Stewards of Works with resources, skills and access to digital technology are encouraged, as much as they possibly can, to provide support for and training to develop the skills needed to document and produce high-quality Records to other cultural institutions in the world who lack such means.

Article 15 – Stewards and other parties engaged in making Records should share digital technology, where feasible, and collaborate on strategies to make it more affordable.

Article 16 – Stewards of Works and other parties engaged in making Records are encouraged to work collaboratively to develop compatible systems to enable the exchange of recorded data and metadata on a global scale. A set of specific technological standards and practical guidelines will be produced by a ReACH technical committee. These standards and guidelines will be revised as technology evolves.

Article 17 – In light of the major infrastructure requirements to ensure long-term preservation and migration of digital Records, public-private partnerships should be encouraged as well as collaborations between countries.

## DEFINITIONS

A. ReACH stands for Reproduction of Art and Cultural Heritage

B. “Work” means a work of art or other cultural item. The term Work is intended to be broadly construed and includes, but is not limited to, works of art in all media and eras, e.g., paintings, works on paper, sculptures, murals, antiquities, monuments, architecture and architectural elements, and archaeological sites.

C. “Endangered Work” means Work threatened by environmental hazards, conflicts, terrorism, mass tourism and other natural and human-made disasters.

D. “Steward” means any governmental or private entity that owns or possesses Works held for the benefit of the public. The term Steward is intended to be broadly construed and includes, but is not limited to, museums, sites, monuments, libraries, repositories, archives, places of worship, whether governmental, sovereign, or private.

E. “Record” means a digital recording or reproduction of a Work and the data generated in the process of faithfully capturing images and data of the Work so as to create a high quality digital or physical reproduction of the Work.

F. “High quality” means a level of quality sufficient to constitute a representation of a Work as faithful as possible.

## Contacts

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**#ReACHdialogue**



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Paulina Borghese in glass, red wax and resin by Factum Arte. ©Andrea Avezzù, courtesy of La Biennale di Venezia.

